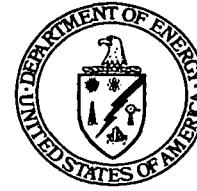


## Department of Energy

Ohio Field Office  
Fernald Area Office  
P. O. Box 538705  
Cincinnati, Ohio 45253-8705  
(513) 648-3155



3332

OCT 26 2000

Mr. James A. Saric, Remedial Project Manager  
U.S. Environmental Protection Agency  
Region V-SRF-5J  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

DOE-0084-01

Mr. Tom Schneider, Project Manager  
Ohio Environmental Protection Agency  
401 East 5<sup>th</sup> Street  
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

### TRANSMITTAL OF THE AUGUST-SEPTEMBER 2000 MONTHLY REPORTS FOR IMPACTED MATERIAL PLACEMENT AT THE ON-SITE DISPOSAL FACILITY

Enclosed for your information is the August-September 2000 Monthly Reports for Impacted Material Placement at the On-Site Disposal Facility (OSDF). The last day of impacted material placement for the current construction season occurred on September 22, 2000. This is the final report for the current construction season. The following information is included:

- Air monitoring sampling data August-September 2000 readings from the OSDF, Southern Waste Units (SWU), and Haul Road
- Placement graphs for
  - August-September Category 1 soil placement versus projected placement In-place Cubic Yards (ICY)
  - August-September Debris placement versus projected placement (ICY)
  - August-September Total placement versus project placement (ICY)
  - August-September Total placement versus projected placement In-bank Cubic Yards (BCY)

OCT 26 2000

Mr. James A. Saric  
Mr. Tom Schneider

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- Current surface plan views – Cell 1, Cell 2, and Cell 3 plan views showing the current lift of impacted material as of September 30, 2000. This is the final surface view for the calendar year 2000.
- OSDF cross sections – Selected cross sections looking north and west showing placement progress.

#### Summary

Approximately 51,000 ICY of impacted material have been placed during the months of August and September 2000. Approximately 167,500 ICY of impacted material have been placed since the start of the construction season (March 8, 2000). These quantities are based on surveyed quantities. The enclosed graphs reflect estimated in-place quantities based on shrinkage factors for compaction and bulking factors. The estimated quantities on the graph are within 3 percent of the survey quantities. As shown on the graphs, total actual placement exceeded the total projected values.

Approximately 15,700 ICY of select impacted material was placed in the months of August and September to complete the select impacted material layer in Cell 1. There was a total of approximately 37,300 ICY of material placed in the select impacted layer. Cell 1 has reached 100 percent of its impacted material storage capacity. Cell 2 remains at approximately 50 percent of its impacted material storage capacity. Cell 3 has approximately reached 25 percent of its impacted material storage capacity.

Other activities within the cells included placement of additional Category 3 (transite) material in the same grid as the demonstration, in accordance with proposed Addendum 5 to the Impacted Materials Placement Plan (IMPP). A second activity was stockpiling Category 2 materials in Cell 3, in accordance with the IMPP, to be used as road material within the cell. Also, removal of silt in the Cell 2 and Cell 3 catchment areas continued

The current surface plans for Cells 2 and 3 show the category of impacted material placed at each grid. The latest lift is noted on the grid along with the quantity of that lift and the date it was placed. Grids with the same lift number will not necessarily contain the same category of material. The Cell 1 surface plan shows the contours for the completed select impacted material layer.

Planned placement includes two lifts of Category 2 material followed by an intervening layer. Field conditions, however, do not allow this to happen for all situations. Also, Category 4 material needs to be put into grids when that material is available. Availability of a specific category of material, drainage issues, and timing of material to the cell all effect the placement of impacted material. Impacted material was placed in accordance with the IMPP in Cells 1, 2 and 3. Category 5 material was placed in trenches in Cell 2 and Category 3 impacted material was placed in Cell 3.

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OCT 26 2000

Mr. James A. Saric  
Mr. Tom Schneider

-3-

If you have any questions or require additional information, please contact Jay Jalovec at (513) 648-3122.

Sincerely,

*Johnny Reising*

FEMP:Jalovec

Johnny W. Reising  
Fernald Remedial Action  
Project Manager

Enclosure

cc w/enclosure:

G. Jablonowski, USEPA-V, SRF-5J  
T. Schneider, OEPA-Dayton (three copies of enclosure)  
F. Bell, ATSDR  
M. Schupe, HSI GeoTrans  
R. Vandegrift, ODH  
F. Hodge, Tetra Tech  
AR Coordinator, Fluor Fernald, Inc./78

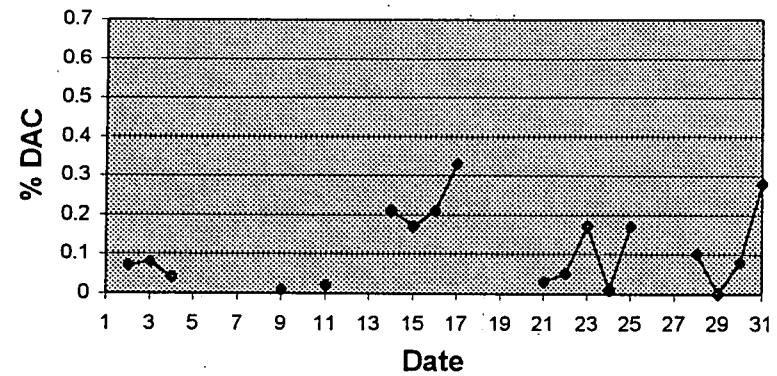
cc w/o enclosure:

N. Hallein, EM-31/CLOV  
D. Carr, Fluor Fernald, Inc./2  
M. Cherry, Fluor Fernald, Inc./52-2  
J. D. Chiou, Fluor Fernald, Inc./52-0  
T. Hagen, Fluor Fernald, Inc./65-2  
J. Harmon, Fluor Fernald, Inc./90  
S. Hinnefeld, Fluor Fernald, Inc./31  
M. Jewett, Fluor Fernald, Inc./52-2  
U. Kumthekar, Fluor Fernald, Inc./64  
T. Walsh, Fluor Fernald, Inc./65-2  
A. Snider, Fluor Fernald, Inc./64  
C. Van Arsdale, Fluor Fernald, Inc./64  
ECDC, Fluor Fernald, Inc./52-7

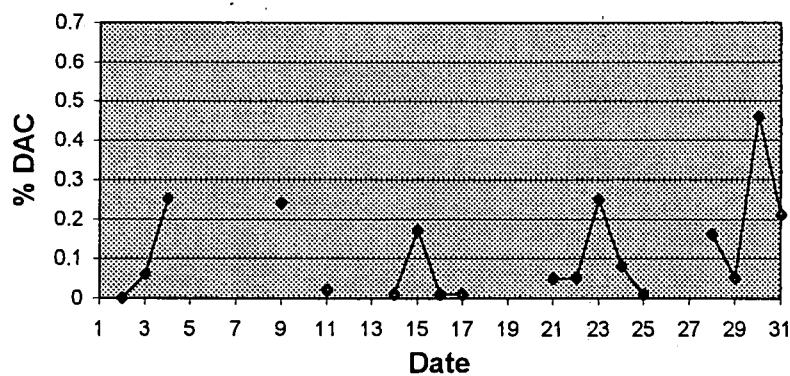
000003

| Day        | 1    | 2    | 3    | 4    | 5 | 6 | 7 | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19 | 20   | 21   | 22   | 23   | 24   | 25   | 26   | 27   | 28   | 29   | 30   | 31   |      |
|------------|------|------|------|------|---|---|---|------|------|------|------|------|------|------|------|------|------|------|----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| N. BNDY    | 0.07 | 0.08 | 0.04 |      |   |   |   | 0.01 |      | 0.02 |      | 0.21 | 0.17 | 0.21 | 0.33 |      |      |      |    | 0.03 | 0.05 | 0.17 | 0.01 | 0.17 |      |      | 0.1  | 0    | 0.08 | 0.28 |      |      |
| S. BNDY    |      | 0    | 0.06 | 0.25 |   |   |   | 0.24 |      | 0.02 |      | 0.01 | 0.17 | 0.01 | 0.01 |      |      |      |    | 0.05 | 0.05 | 0.25 | 0.08 | 0.01 |      |      | 0.16 | 0.05 | 0.46 | 0.21 |      |      |
| NE. BNDY   |      | 0    | 0.01 | 0.04 |   |   |   | 0.01 |      | 0.26 |      | 0.21 | 0.24 | 0.15 | 0.1  |      |      |      |    | 0.05 | 0.02 | 0.17 | 0.07 | 0.01 |      |      | 0.42 | 0.05 | 0.05 | 0.15 |      |      |
| NW. BNDY   |      | 0    | 0.01 | 0.04 |   |   |   | 0.32 |      | 0.02 |      | 0.06 | 0.24 | 0.06 | 0.01 |      |      |      |    | 0.12 | 0.02 | 0.17 | 0.08 | 0.09 |      |      | 0.23 | 0    | 0.08 | 0.28 |      |      |
| SE. BNDY   |      | 0    | 0.22 | 0.11 |   |   |   | 0.24 |      | 0.36 |      | 0.14 | 0.04 | 0.21 | 0.07 |      |      |      |    | 0.27 | 0.02 | 0.17 | 0.01 | 0.07 |      |      | 0.04 | 0.05 | 0.05 | 0.01 |      |      |
| SW. BNDY   | 0.07 | 0.22 | 0.31 |      |   |   |   | 0.01 |      | 0.07 |      | 0.14 | 0.03 | 0.06 | 0.07 |      |      |      |    | 0.03 | 0.02 | 0.09 | 0.07 | 0.01 |      |      | 0.04 | 0.02 | 0.14 | 0.01 |      |      |
| N. O/N     | 0    | 0.03 | 0.04 | 0.07 |   |   |   | 0.02 | 0.03 |      | 0.06 |      | 0.05 | 0.02 | 0.09 | 0.05 |      |      |    | 0.02 | 0.09 | 0.14 | 0    | 0    |      |      | 0.01 | 0.01 | 0.11 | 0.14 |      |      |
| S. O/N     | 0    | 0.03 | 0.04 | 0.07 |   |   |   | 0.02 | 0.02 |      | 0    |      | 0.03 | 0.18 | 0.05 | 0.05 |      |      |    | 0    | 0.09 | 0.14 | 0    | 0.04 |      |      | 0.01 | 0.19 | 0.1  | 0.22 |      |      |
| NE. O/N    | 0    | 0.03 | 0.05 | 0.03 |   |   |   | 0.01 | 0.03 |      | 0    |      | 0.02 | 0.06 | 0.05 | 0.04 |      |      |    | 0.02 | 0.01 | 0.03 | 0.04 | 0    |      |      | 0.02 | 0.03 | 0.01 | 0.18 |      |      |
| NW. O/N    | 0    | 0.03 | 0.01 | 0.01 |   |   |   | 0.05 | 0.03 |      | 0.01 |      | 0.04 | 0.03 | 0.04 | 0.01 |      |      |    | 0    | 0.09 | 0.05 | 0    | 0.12 |      |      | 0    | 0.03 | 0.04 | 0.09 |      |      |
| SE. O/N    | 0.03 | 0.03 | 0.13 | 0.01 |   |   |   | 0.03 | 0.03 |      | 0.05 |      | 0.02 | 0.02 | 0.09 | 0.08 |      |      |    | 0.01 | 0.09 | 0.14 | 0.17 | 0.12 |      |      | 0.02 | 0.03 | 0.06 | 0.05 |      |      |
| SW. O/N    | 0    | 0    | 0.05 | 0.15 |   |   |   | 0.02 | 0    |      | 0    |      | 0.04 | 0.1  | 0.05 | 0.08 |      |      |    | 0    | 0.01 | 0.01 | 0.04 | 0    |      |      | 0.01 | 0.03 | 0.01 | 0.09 |      |      |
| days sum   | 0    | 0.14 | 0.6  | 0.79 | 0 | 0 | 0 | 0    | 0.83 | 0    | 0.75 | 0    | 0    | 0.77 | 0.89 | 0.7  | 0.59 | 0    | 0  | 0    | 0.55 | 0.18 | 1.02 | 0.32 | 0.36 | 0    | 0    | 0.99 | 0.17 | 0.86 | 0.94 |      |
| days avg   | 0    | 0.02 | 0.1  | 0.13 | 0 | 0 | 0 | 0    | 0.14 | 0    | 0.13 | 0    | 0    | 0.13 | 0.15 | 0.12 | 0.1  | 0    | 0  | 0    | 0.09 | 0.03 | 0.17 | 0.05 | 0.06 | 0    | 0    | 0.17 | 0.03 | 0.14 | 0.16 |      |
| nights sum | 0.03 | 0.15 | 0.32 | 0.34 | 0 | 0 | 0 | 0    | 0.15 | 0.14 | 0    | 0.12 | 0    | 0    | 0.2  | 0.41 | 0.37 | 0.31 | 0  | 0    | 0    | 0.05 | 0.38 | 0.51 | 0.25 | 0.28 | 0    | 0    | 0.07 | 0.32 | 0.33 | 0.77 |
| nights avg | 0.01 | 0.03 | 0.05 | 0.06 | 0 | 0 | 0 | 0    | 0.03 | 0.02 | 0    | 0.02 | 0    | 0    | 0.03 | 0.07 | 0.06 | 0.05 | 0  | 0    | 0    | 0.01 | 0.06 | 0.09 | 0.04 | 0.05 | 0    | 0    | 0.01 | 0.05 | 0.06 | 0.13 |

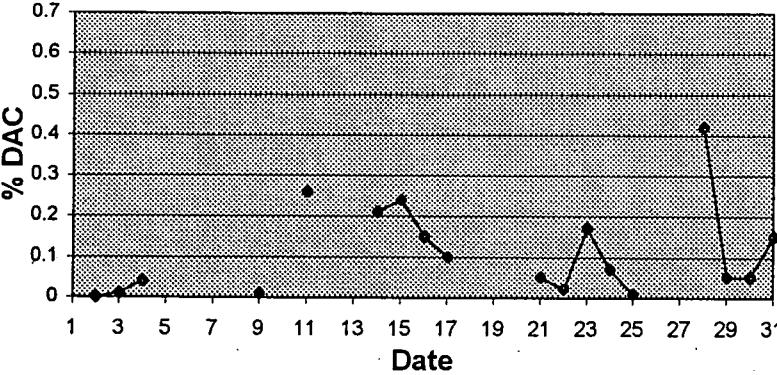
OSDF - North Boundary



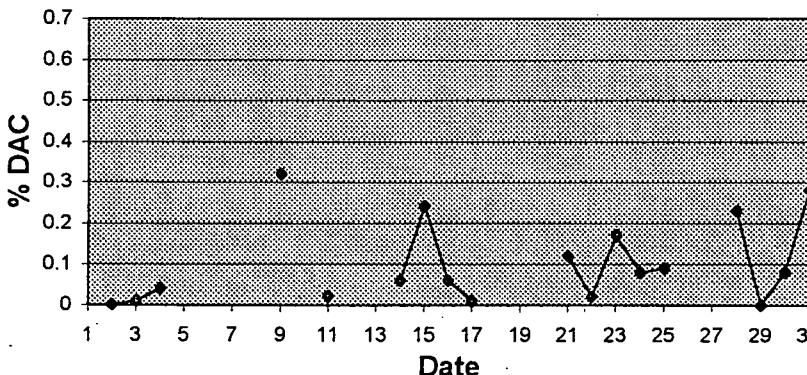
OSDF - South Boundary



OSDF - Northeast Boundary



OSDF - Northwest Boundary



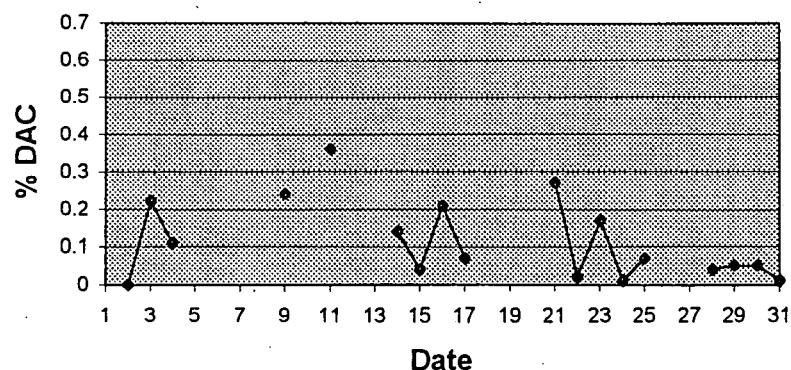
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2

Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

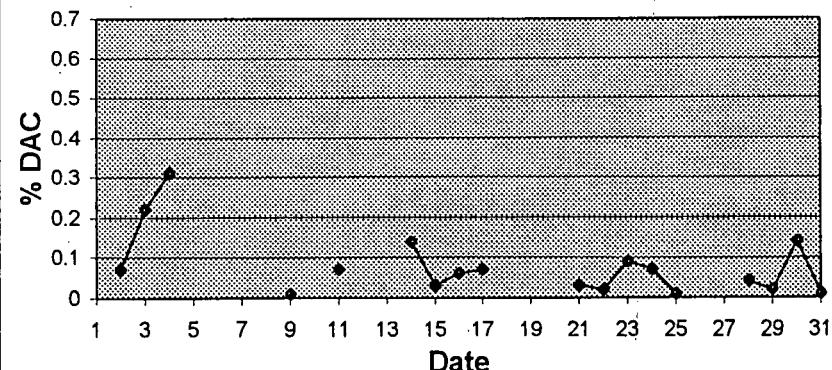
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OSDF BOUNDARY AIR SAMPLES - AUGUST 2000

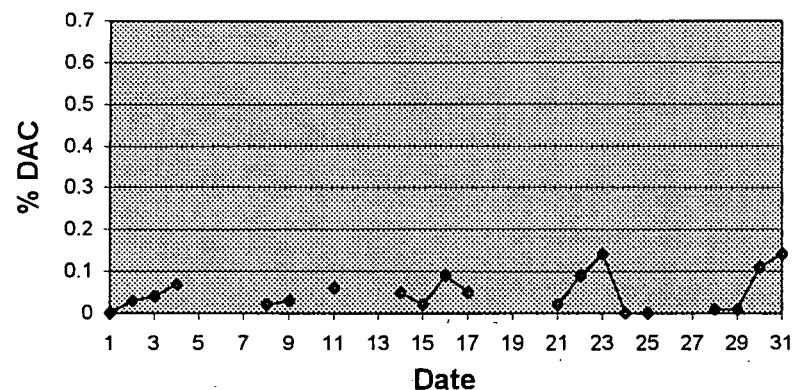
OSDF - Southeast Boundary



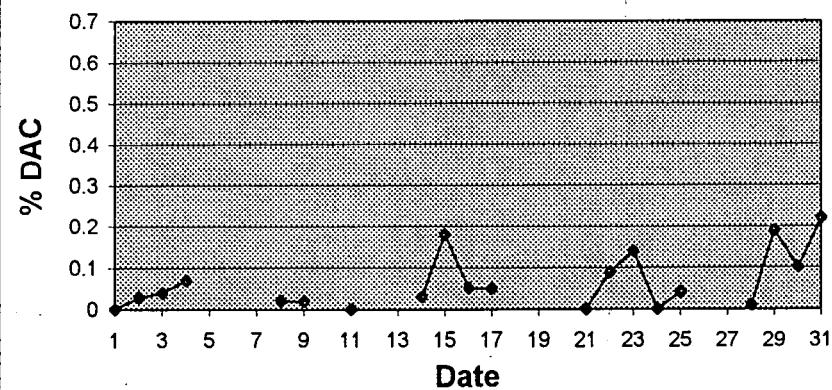
OSDF - Southwest Boundary



OSDF - North Boundary Overnight



OSDF - South Boundary Overnight



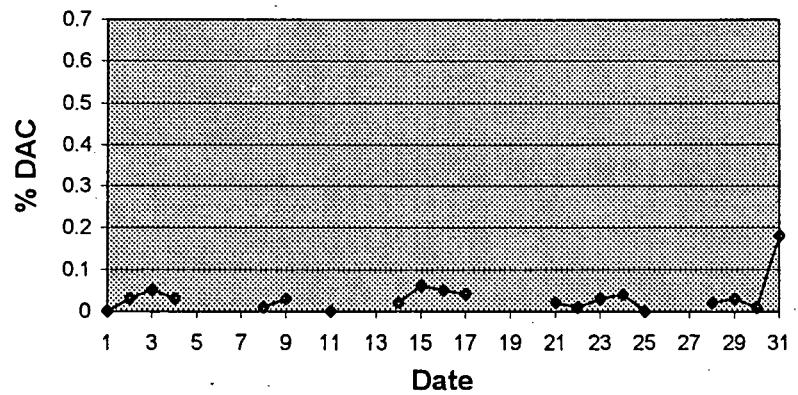
500000

Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

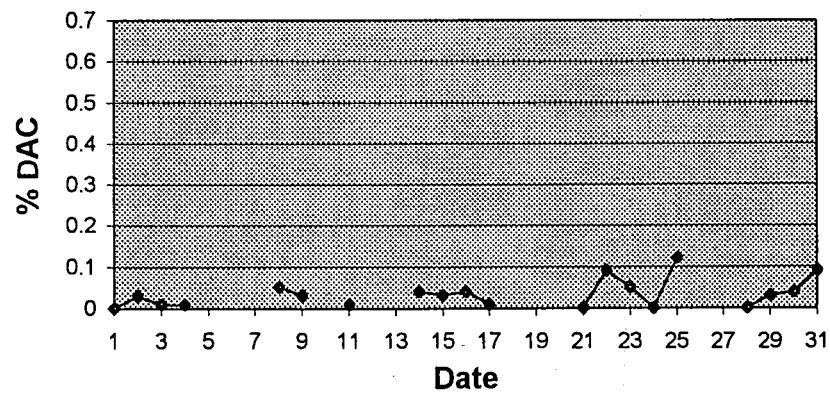
33332

OSDF BOUNDARY AIR SAMPLES - AUGUST 2000

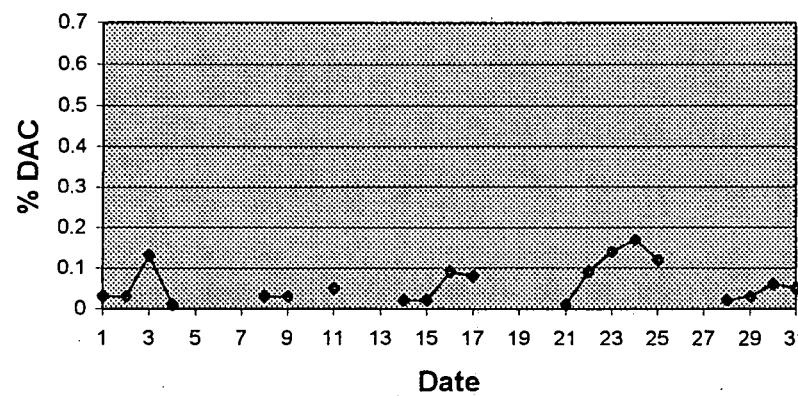
OSDF - Northeast Boundary Overnight



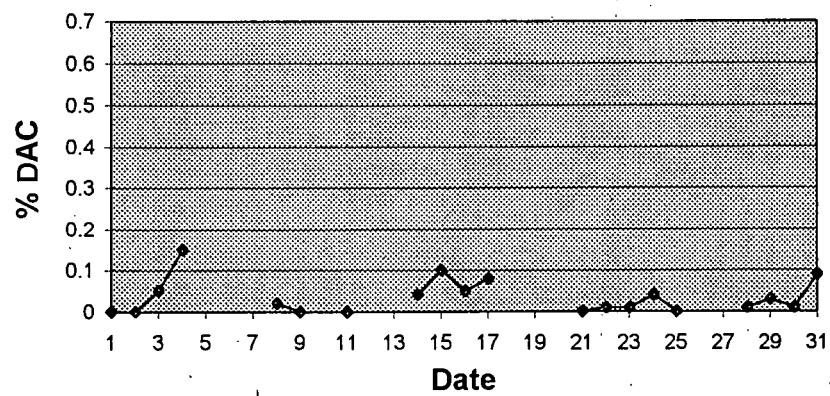
OSDF - Northwest Boundary Overnight



OSDF - Southeast Boundary Overnight



OSDF - Southwest Boundary Overnight



900000

Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

20  
30  
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20

000007

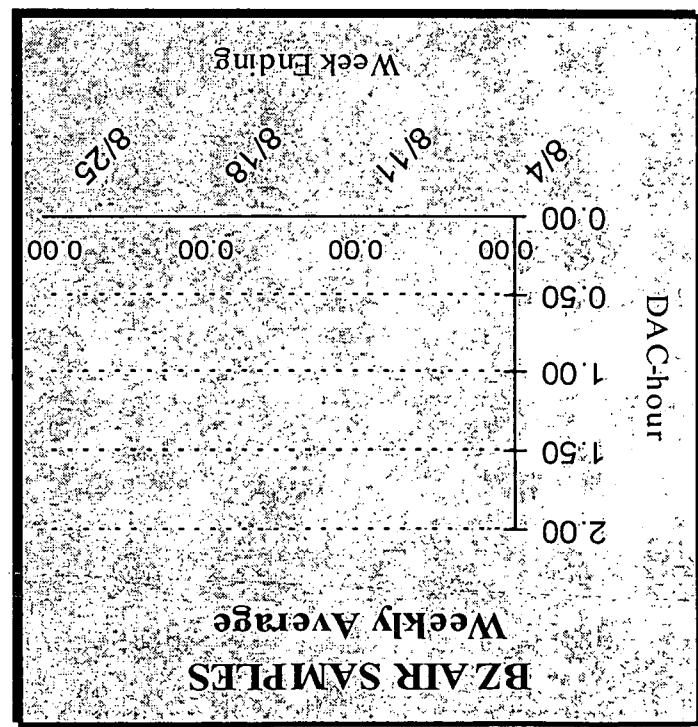
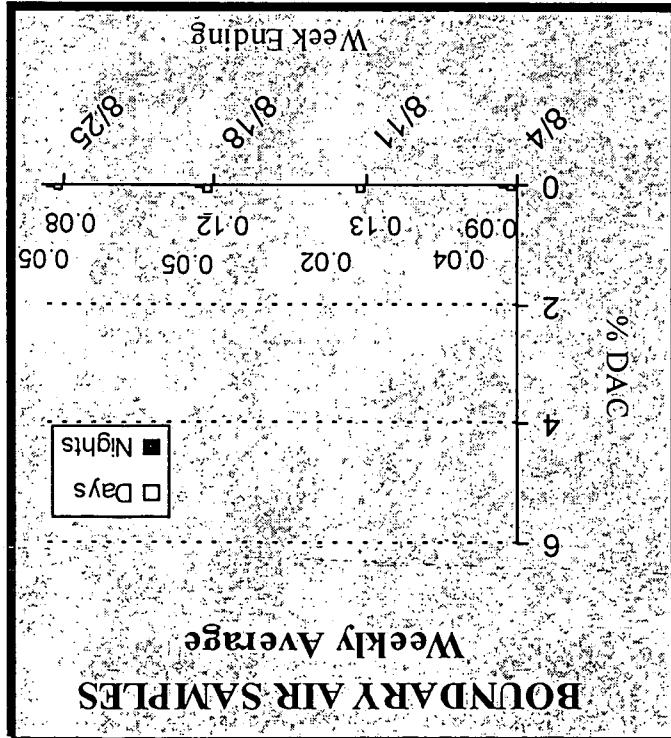
Note: BZA limit - 12 DAC-hrs/week; Boundary limit - 2% DAC averaged over a week

- Workers remain safe working distance from operating equipment and upwind of potential dust generating activities
- Water used for dust control in work areas

### Engineering and Administrative Controls

- Permanent power to all air samplers; all air samplers run 24 hours/day
- Performance of QDF impacted material placement

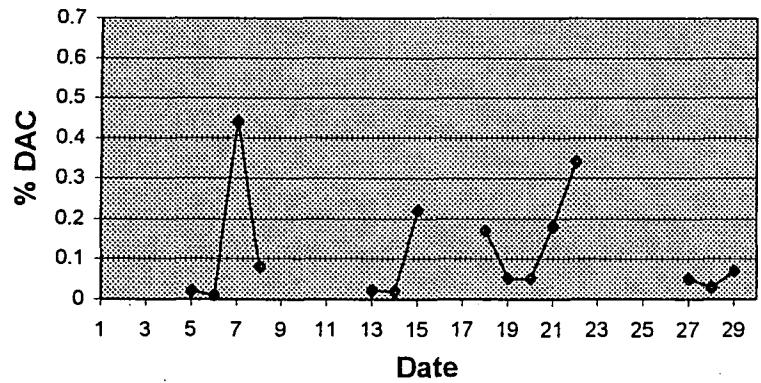
### Project Activities and Events



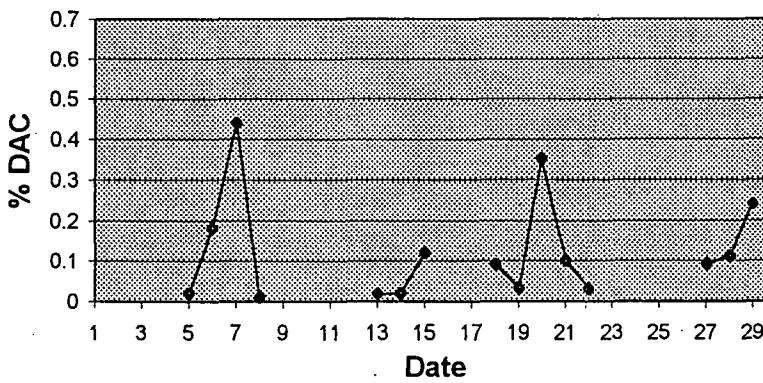
On Site Disposal Facility - August 3332

| Day        | 1 | 2 | 3 | 4 | 5    | 6    | 7    | 8    | 9 | 10   | 11   | 12 | 13   | 14   | 15   | 16 | 17   | 18   | 19   | 20   | 21   | 22   | 23 | 24 | 25 | 26   | 27   | 28   | 29   | 30   |   |   |
|------------|---|---|---|---|------|------|------|------|---|------|------|----|------|------|------|----|------|------|------|------|------|------|----|----|----|------|------|------|------|------|---|---|
| N. BNDY    |   |   |   |   | 0.02 | 0.01 | 0.44 | 0.08 |   |      |      |    | 0.02 | 0.02 | 0.22 |    | 0.17 | 0.05 | 0.05 | 0.18 | 0.34 |      |    |    |    | 0.05 | 0.03 | 0.07 |      |      |   |   |
| S. BNDY    |   |   |   |   | 0.02 | 0.18 | 0.44 | 0.01 |   |      |      |    | 0.02 | 0.02 | 0.12 |    | 0.09 | 0.03 | 0.35 | 0.1  | 0.03 |      |    |    |    | 0.09 | 0.11 | 0.24 |      |      |   |   |
| NE. BNDY   |   |   |   |   | 0.02 | 0.06 | 0.13 | 1.11 |   |      |      |    | 0.16 | 0.02 | 0.02 |    | 0.02 | 0.18 | 0.27 | 0.25 | 0.1  |      |    |    |    | 0.09 | 0.04 | 0.02 |      |      |   |   |
| NW. BNDY   |   |   |   |   | 0.09 | 0.18 | 0.21 | 0.06 |   |      |      |    | 0.02 | 0.05 | 0.02 |    | 0.09 | 0.11 | 0.03 | 0.18 | 0.1  |      |    |    |    | 0.02 | 0.11 | 0.15 |      |      |   |   |
| SE. BNDY   |   |   |   |   | 0.02 | 0.18 | 0.21 | 0.63 |   |      |      |    | 0.09 | 0.05 | 0.12 |    | 0.09 | 0.03 | 0.05 | 0.25 | 0.03 |      |    |    |    | 0.09 | 0.18 | 0.15 |      |      |   |   |
| SW. BNDY   |   |   |   |   | 0.02 | 0.21 | 0.14 |      |   |      |      |    | 0.04 | 0.05 | 0.12 |    | 0.02 | 0.03 | 0.03 | 0.18 | 0.05 |      |    |    |    | 0.12 | 0.04 | 0.07 |      |      |   |   |
| N. O/N     |   |   |   |   | 0.00 | 0.15 | 0.03 | 0.12 |   | 0.01 |      |    | 0.05 | 0.08 | 0.01 |    | 0    | 0.09 | 0.01 | 0.13 | 0.06 |      |    |    |    | 0.01 | 0.02 | 0.05 | 0.03 | 0.11 |   |   |
| S. O/N     |   |   |   |   | 0.01 | 0.13 | 0.07 | 0.02 |   | 0.03 |      |    | 0.02 | 0.16 | 0.28 |    | 0    | 0.05 | 0.06 | 0.06 | 0.1  |      |    |    |    | 0.01 | 0.02 | 0.01 | 0.07 | 0.11 |   |   |
| NE. O/N    |   |   |   |   | 0.00 | 0    | 0.07 | 0.09 |   | 0.01 |      |    | 0.05 | 0.12 | 0.06 |    | 0.02 | 0.03 | 0.01 | 0.13 | 0.06 |      |    |    |    | 0    | 0    | 0.02 | 0.16 | 0.07 |   |   |
| NW. O/N    |   |   |   |   | 0.00 | 0.03 | 0.02 | 0.01 |   | 0.01 |      |    | 0.09 | 0.12 | 0.28 |    | 0.02 | 0.09 | 0.03 | 0.02 | 0.01 |      |    |    |    | 0.01 | 0.1  | 0.07 | 0.03 | 0.03 |   |   |
| SE. O/N    |   |   |   |   | 0.02 | 0.04 | 0.2  | 0.05 |   | 0.04 |      |    | 0    | 0.16 | 0.19 |    | 0    | 0.01 | 0.03 | 0.13 | 0.01 |      |    |    |    | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 |   |   |
| SW. O/N    |   |   |   |   | 0.00 | 0.02 | 0.07 | 0.12 |   | 0.03 |      |    | 0    | 0.03 | 0.01 |    | 0.01 | 0.03 | 0.1  | 0.13 | 0.1  |      |    |    |    | 0    | 0.05 | 0.07 | 0.01 |      |   |   |
| days sum   | 0 | 0 | 0 | 0 | 0.19 | 0.61 | 1.64 | 2.03 | 0 | 0    | 0    | 0  | 0.35 | 0.21 | 0.62 | 0  | 0    | 0.48 | 0.43 | 0.78 | 1.14 | 0.65 | 0  | 0  | 0  | 0    | 0.46 | 0.51 | 0.7  | 0    | 0 |   |
| days avg   | 0 | 0 | 0 | 0 | 0.03 | 0.1  | 0.27 | 0.34 | 0 | 0    | 0    | 0  | 0.06 | 0.04 | 0.1  | 0  | 0    | 0.08 | 0.07 | 0.13 | 0.19 | 0.11 | 0  | 0  | 0  | 0    | 0.08 | 0.09 | 0.12 | 0    | 0 |   |
| nights sum | 0 | 0 | 0 | 0 | 0.03 | 0.37 | 0.46 | 0.41 | 0 | 0    | 0.13 | 0  | 0.21 | 0.67 | 0.83 | 0  | 0    | 0.05 | 0.3  | 0.24 | 0.6  | 0.34 | 0  | 0  | 0  | 0.05 | 0.21 | 0.22 | 0.38 | 0.34 | 0 | 0 |
| nights avg | 0 | 0 | 0 | 0 | 0.01 | 0.06 | 0.08 | 0.07 | 0 | 0    | 0.02 | 0  | 0.04 | 0.11 | 0.14 | 0  | 0    | 0.01 | 0.05 | 0.04 | 0.1  | 0.06 | 0  | 0  | 0  | 0.01 | 0.04 | 0.06 | 0.06 | 0    | 0 |   |

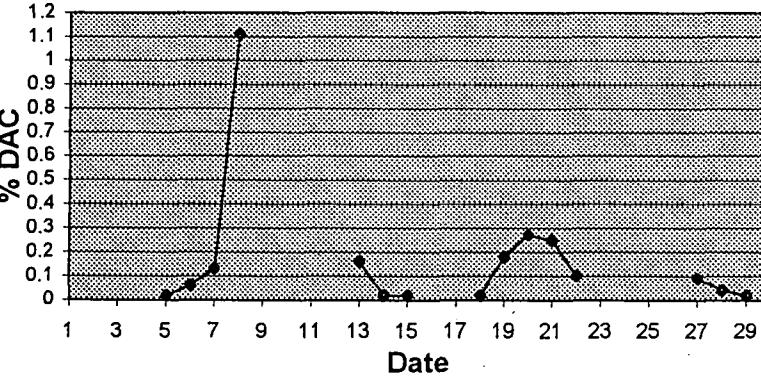
### OSDF - North Boundary



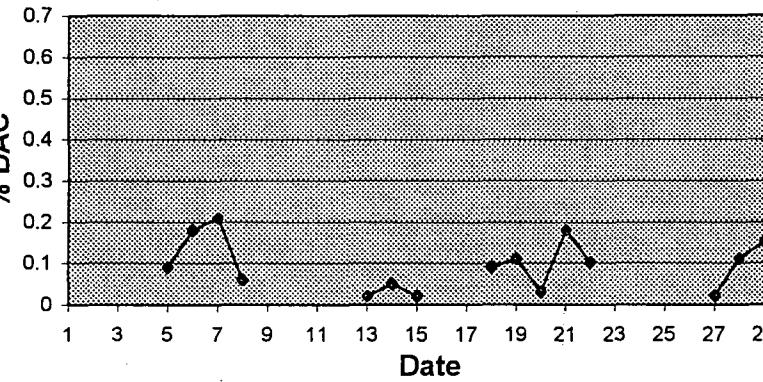
### OSDF - South Boundary



### OSDF - Northeast Boundary



### OSDF - Northwest Boundary

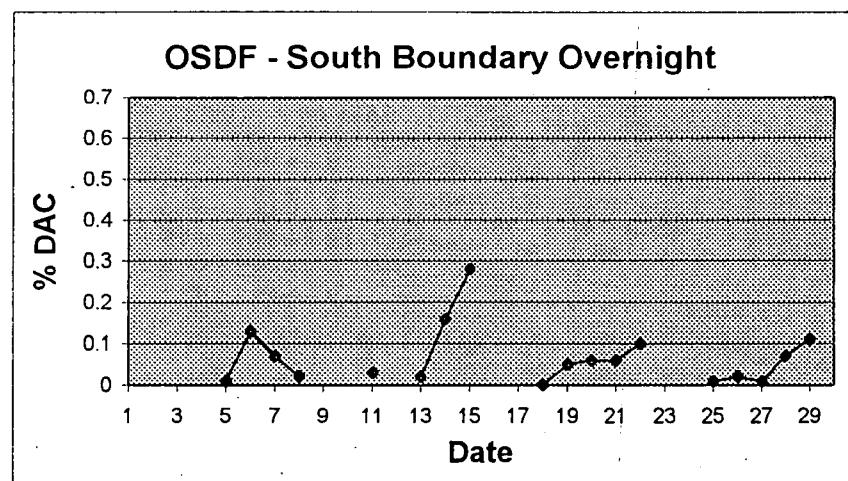
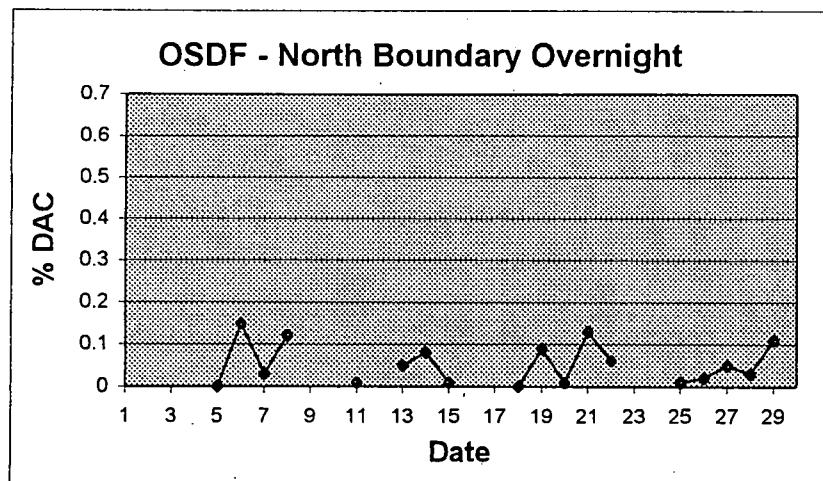
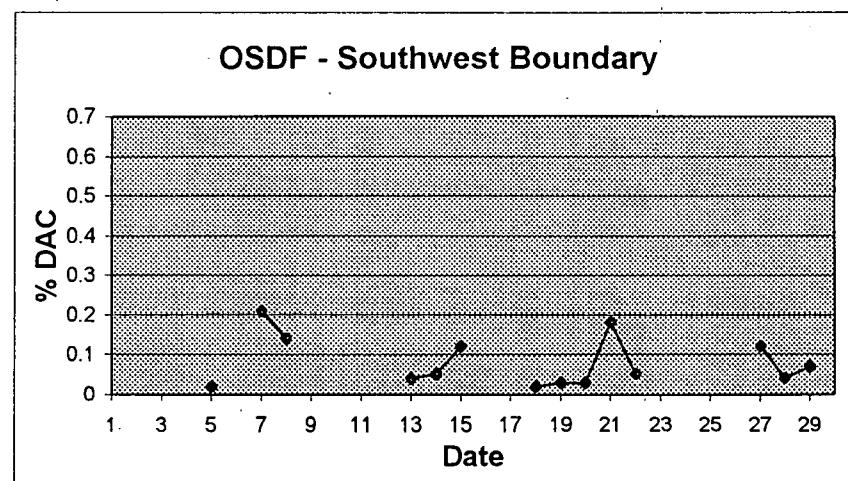
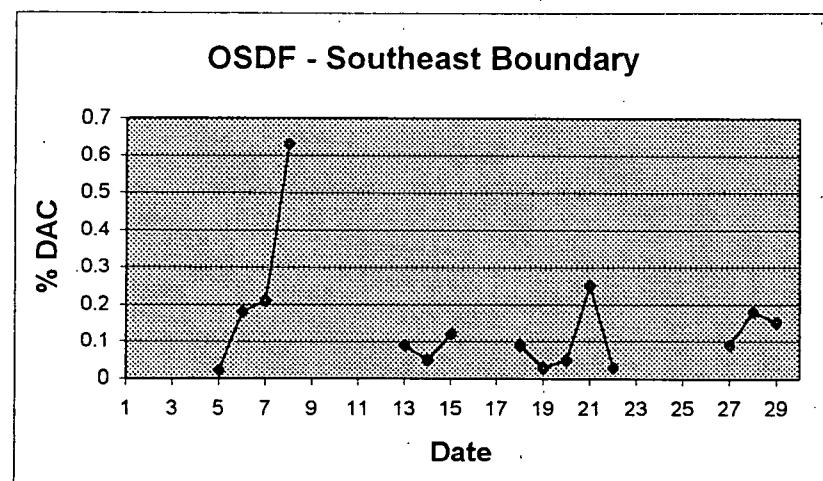


800000

3332

Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

OSDF BOUNDARY AIR SAMPLES - SEPTEMBER 2000



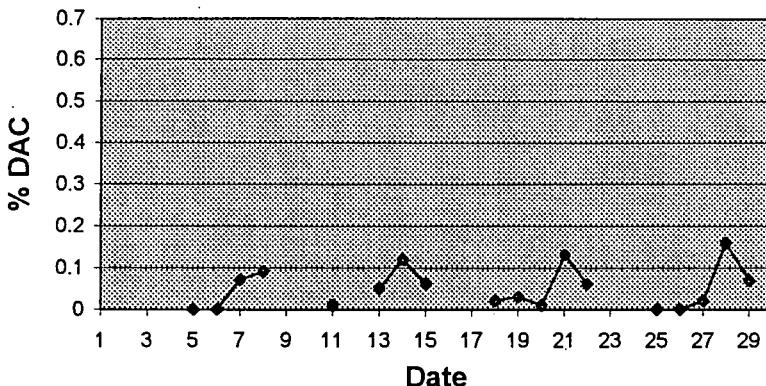
600000

Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

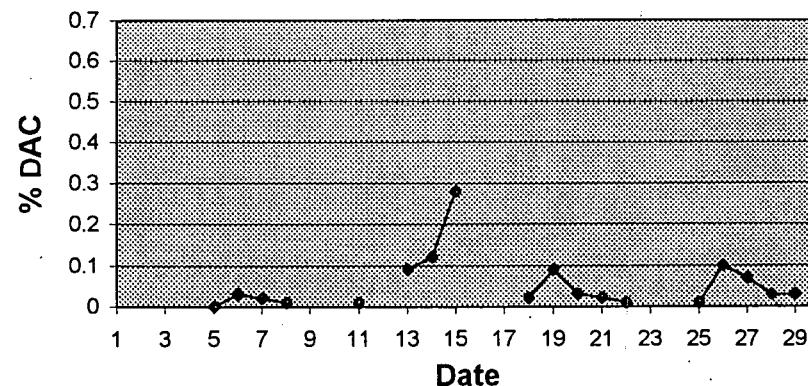
3  
3  
3  
2

OSDF BOUNDARY AIR SAMPLES - SEPTEMBER 2000

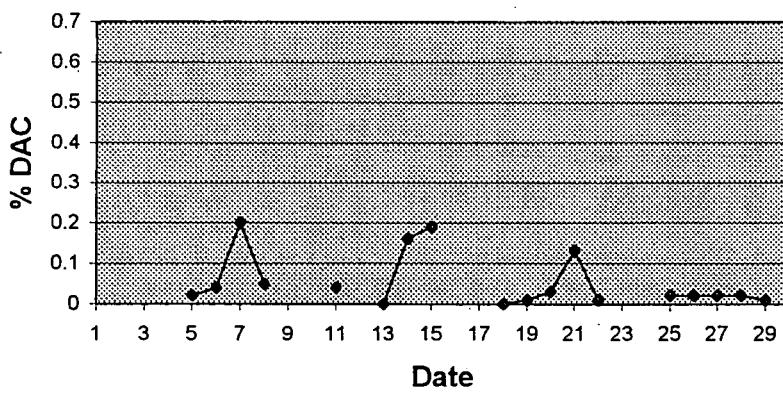
OSDF - Northeast Boundary Overnight



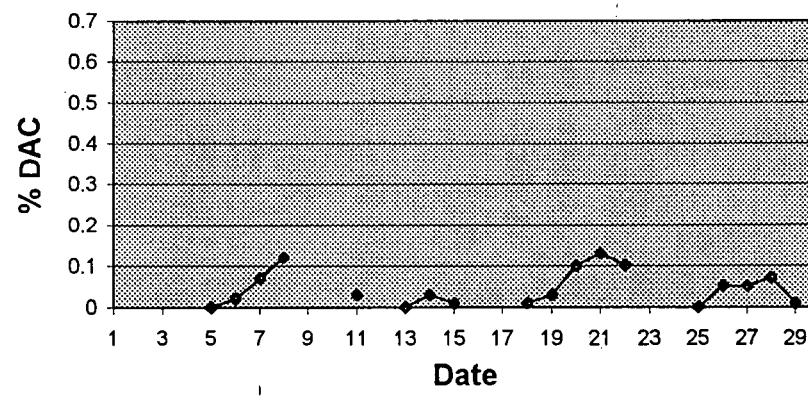
OSDF - Northwest Boundary Overnight



OSDF - Southeast Boundary Overnight



OSDF - Southwest Boundary Overnight

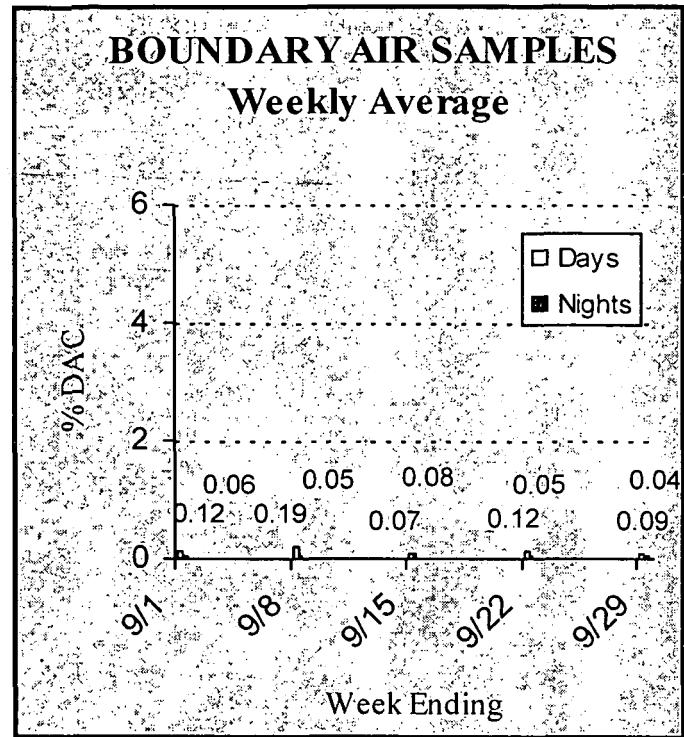
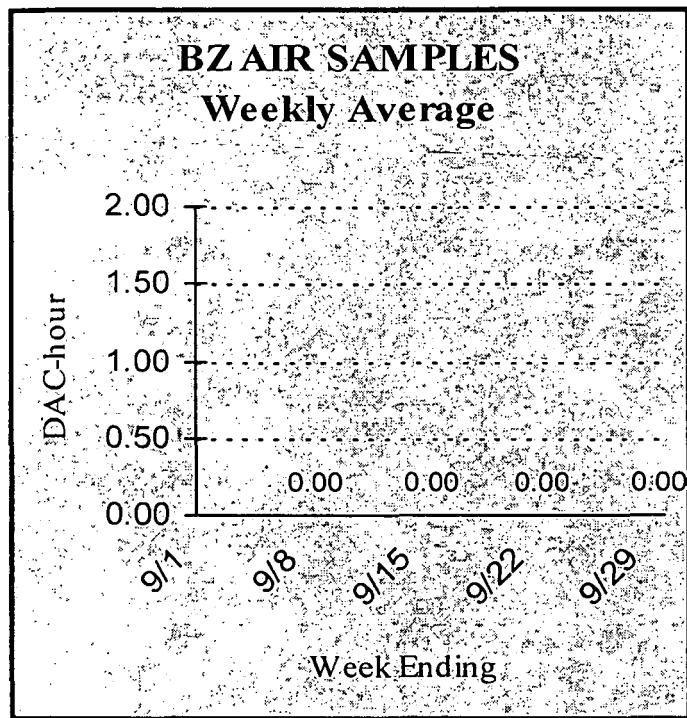


0100000

23333

Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

# On Site Disposal Facility - September<sup>3332</sup>



## Project Activities and Events

- Performance of OSDF impacted material placement
- Permanent power to all air samplers; all air samplers run 24 hours/day
- Placed Th-232 contaminated materials in OSDF; GA for placement area boundary resulted in a non-detect for Th-232 (alpha spec); placement performed on 9/6

## Engineering and Administrative Controls

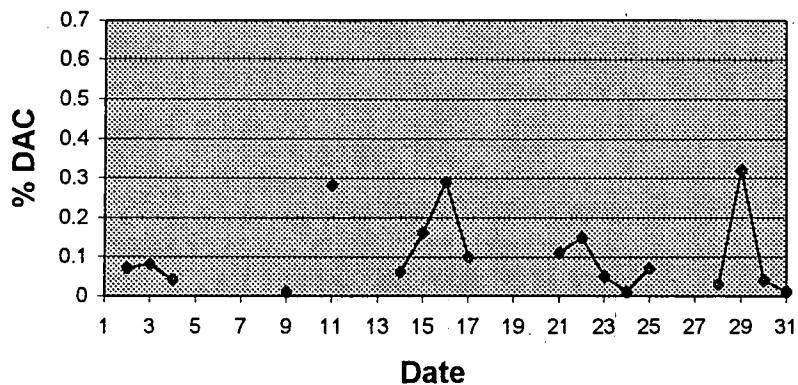
- Water used for dust control in work areas
- Workers remain safe working distance from operating equipment and upwind of potential dust generating activities

Note: BZA limit - 12 DAC-hrs/week; Boundary limit - 2% DAC averaged over a week

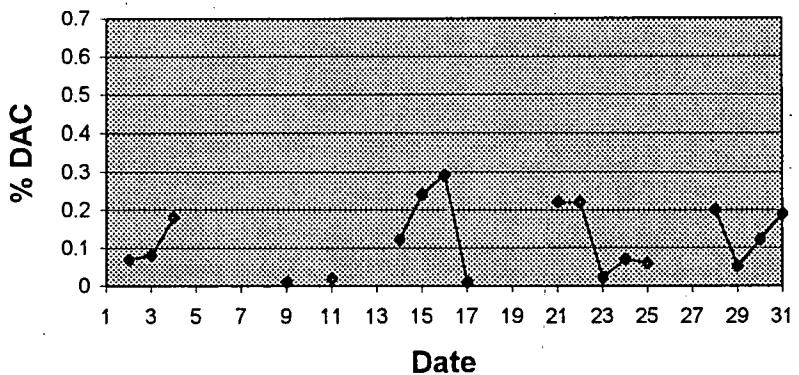
**000011**

| Day      | SWU BOUNDARY AIR SAMPLES - AUGUST 2000 |      |      |      |   |   |   |      |      |      |      |      |      |      |      |      |      |    |    |      |      |      |      |      |      |    |    |      |      |      |      |
|----------|--|------|------|------|---|---|---|------|------|------|------|------|------|------|------|------|------|----|----|------|------|------|------|------|------|----|----|------|------|------|------|
|          | 1                                      | 2    | 3    | 4    | 5 | 6 | 7 | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18 | 19 | 20   | 21   | 22   | 23   | 24   | 25   | 26 | 27 | 28   | 29   | 30   | 31   |
| N. BNDY  | 0.07                                   | 0.08 | 0.04 |      |   |   |   | 0.01 |      | 0.28 |      | 0.06 | 0.16 | 0.29 | 0.1  |      |      |    |    | 0.11 | 0.15 | 0.05 | 0.01 | 0.07 |      |    |    | 0.03 | 0.32 | 0.04 | 0.01 |
| S. BNDY  | 0.07                                   | 0.08 | 0.18 |      |   |   |   | 0.01 |      | 0.02 |      | 0.12 | 0.24 | 0.29 | 0.01 |      |      |    |    | 0.22 | 0.22 | 0.02 | 0.07 | 0.06 |      |    |    | 0.2  | 0.05 | 0.12 | 0.19 |
| E. BNDY  | 0.06                                   | 0.06 | 0.02 |      |   |   |   | 0.06 |      | 0.08 |      | 0.12 | 0.1  | 0.06 | 0.15 |      |      |    |    | 0.04 | 0.08 | 0.02 | 0.01 | 0.13 |      |    |    | 0.03 | 0.2  | 0.07 | 0.07 |
| W. BNDY  | 0.07                                   | 0.06 | 0.04 |      |   |   |   | 0.07 |      |      |      | 0.13 | 0.17 | 0.05 | 0.01 |      |      |    |    | 0.06 | 0.05 | 0.08 | 0.07 | 0.01 |      |    |    | 0.03 |      | 0.02 | 0.12 |
| AFP      |  |      |      |      |   |   |   |      |      |      |      |      |      |      |      |      |      |    |    |      |      |      |      |      |      |    |    |      |      |      |      |
| BASIN #3 |  |      |      |      |   |   |   |      |      |      |      |      |      |      |      |      |      |    |    |      |      |      |      |      |      |    |    |      |      |      |      |
| sum      | 0                                      | 0.27 | 0.28 | 0.28 | 0 | 0 | 0 | 0    | 0.15 | 0    | 0.38 | 0    | 0    | 0.43 | 0.67 | 0.69 | 0.27 | 0  | 0  | 0    | 0.43 | 0.5  | 0.17 | 0.16 | 0.27 | -0 | 0  | 0.29 | 0.57 | 0.25 | 0.39 |
| avg.     | 0                                      | 0.07 | 0.07 | 0.07 | 0 | 0 | 0 | 0    | 0.04 | 0    | 0.13 | 0    | 0    | 0.11 | 0.17 | 0.17 | 0.07 | 0  | 0  | 0    | 0.11 | 0.13 | 0.04 | 0.04 | 0.07 | 0  | 0  | 0.07 | 0.19 | 0.06 | 0.1  |

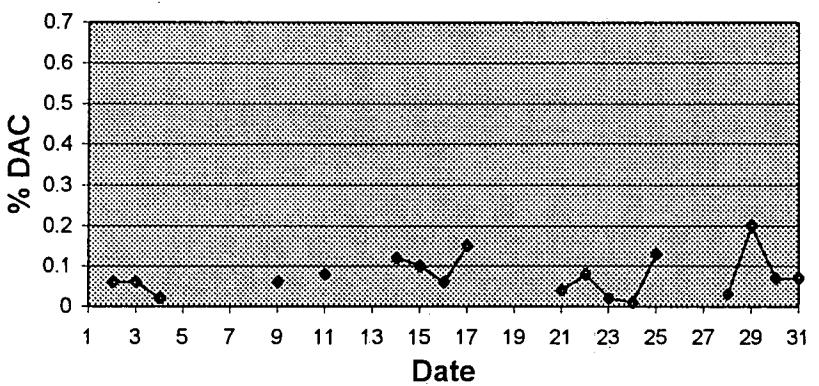
### SWU - North Boundary (T-139)



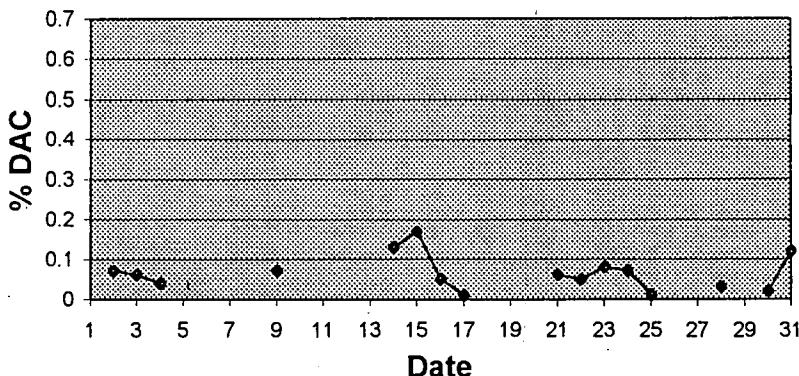
### SWU - South Boundary (Basin #1)



### SWU - East Boundary (Basin #2)



### SWU - West Boundary



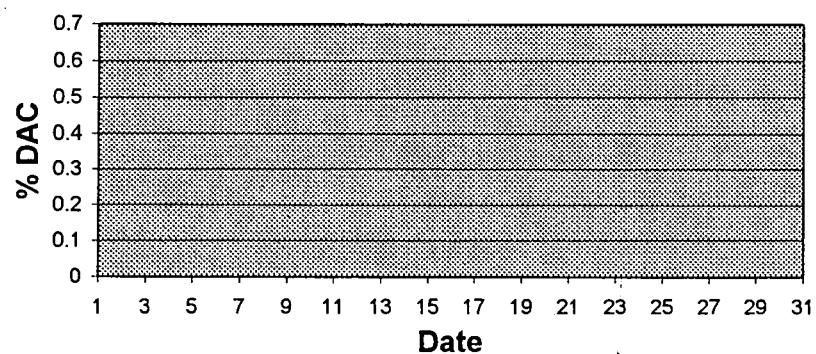
200000

Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

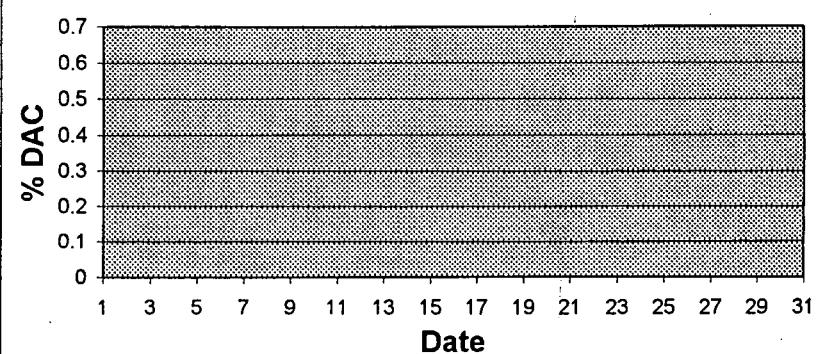
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SWU BOUNDARY AIR SAMPLES - AUGUST 2000

SWU - Active Flyash Pile



SWU - Basin #3

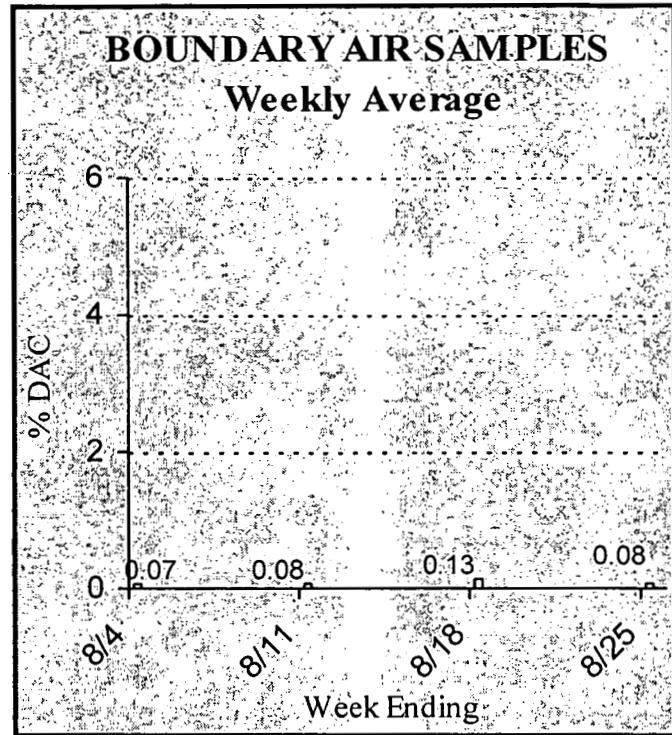
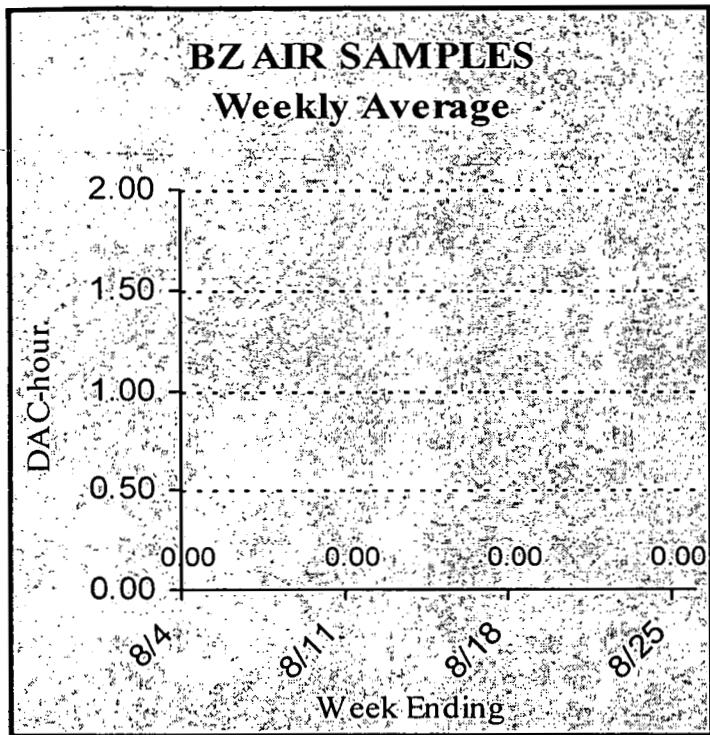


000013

3332

Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

# Southern Waste Units - August



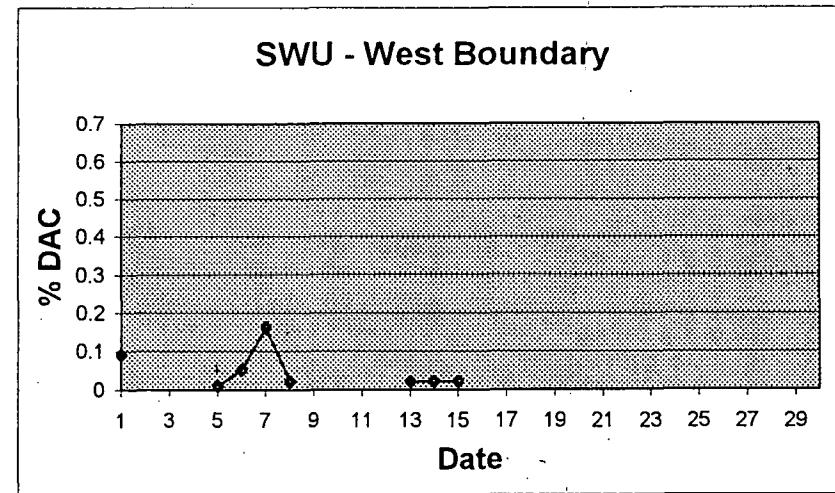
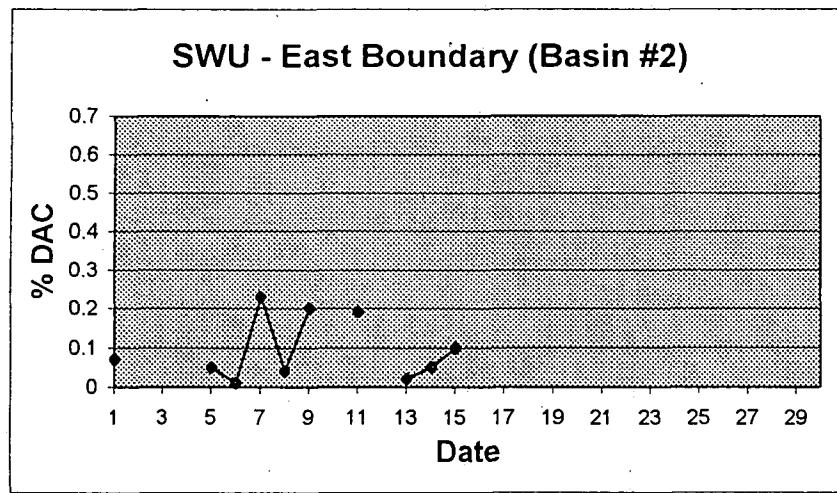
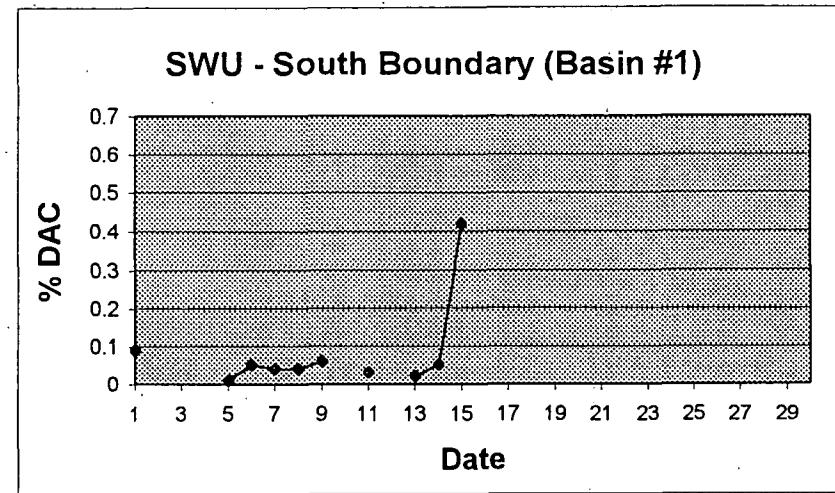
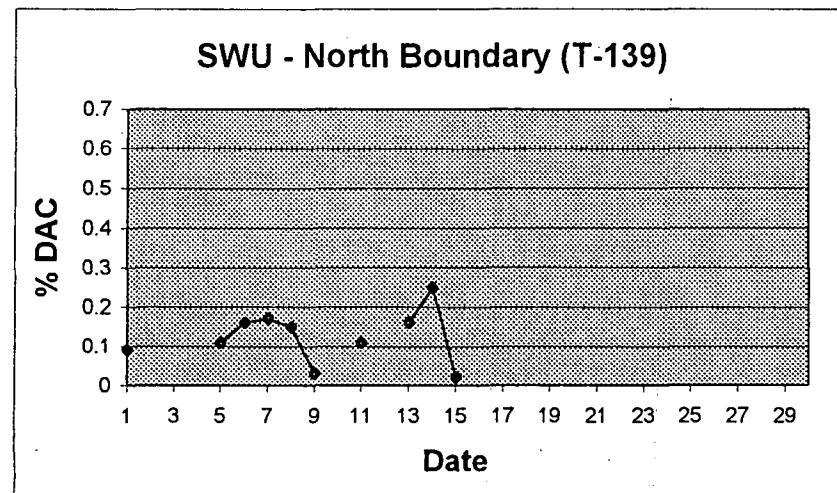
## Project Activities and Events

- Hauling of materials from SWU, excavating from South Field and Active Flyash Pile area
- Excavation of debris/asbestos from areas on SWU and preparation for transport to OSDF

## Engineering and Administrative Controls

- Water application for dust control;
  - Controlled loading of equipment to prevent the spread of contamination
- 000014**
- Note: BZA limit -12 DAC-hrs/week; Boundary limit - 2% DAC averaged over a week

| Day      | 1    | 2 | 3 | 4 | 5    | 6    | 7    | 8    | 9    | 10 | 11   | 12   | 13   | 14   | 15   | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |  |
|----------|------|---|---|---|------|------|------|------|------|----|------|------|------|------|------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|
| N. BNDY  | 0.09 |   |   |   | 0.11 | 0.16 | 0.17 | 0.15 | 0.03 |    | 0.11 |      | 0.16 | 0.25 | 0.02 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| S. BNDY  | 0.09 |   |   |   | 0.01 | 0.05 | 0.04 | 0.04 | 0.06 |    | 0.03 |      | 0.02 | 0.05 | 0.42 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| E. BNDY  | 0.07 |   |   |   | 0.05 | 0.01 | 0.23 | 0.04 | 0.2  |    | 0.19 |      | 0.02 | 0.05 | 0.1  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| W. BNDY  | 0.09 |   |   |   | 0.01 | 0.05 | 0.16 | 0.02 |      |    | 0.02 | 0.02 | 0.02 |      |      |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| AFP      |      |   |   |   |      |      |      |      |      |    |      |      |      |      |      |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| BASIN #3 |      |   |   |   |      |      |      |      |      |    |      |      |      |      |      |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| sum      | 0.34 | 0 | 0 | 0 | 0.18 | 0.27 | 0.6  | 0.25 | 0.29 | 0  | 0.33 | 0    | 0.22 | 0.37 | 0.56 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |  |
| avg.     | 0.09 | 0 | 0 | 0 | 0.05 | 0.07 | 0.15 | 0.06 | 0.1  | 0  | 0.11 | 0    | 0.06 | 0.09 | 0.14 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |  |



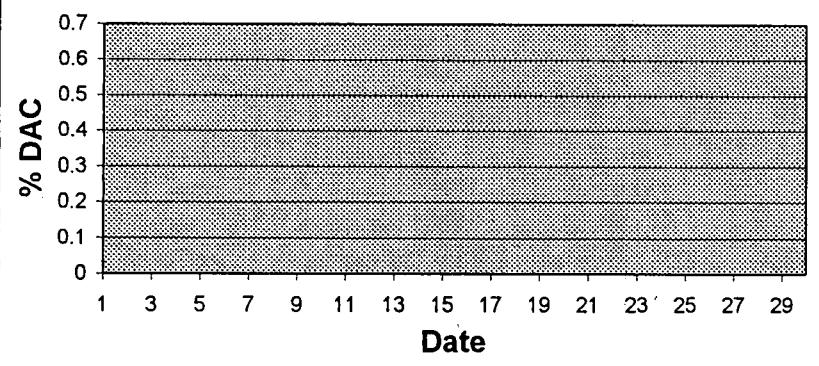
ST0000

1  
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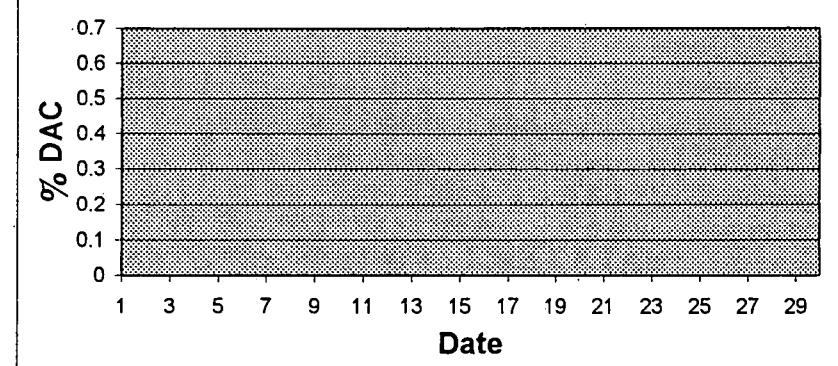
Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

SWU BOUNDARY AIR SAMPLES - SEPTEMBER 2000

**SWU - Active Flyash Pile**



**SWU - Basin #3**

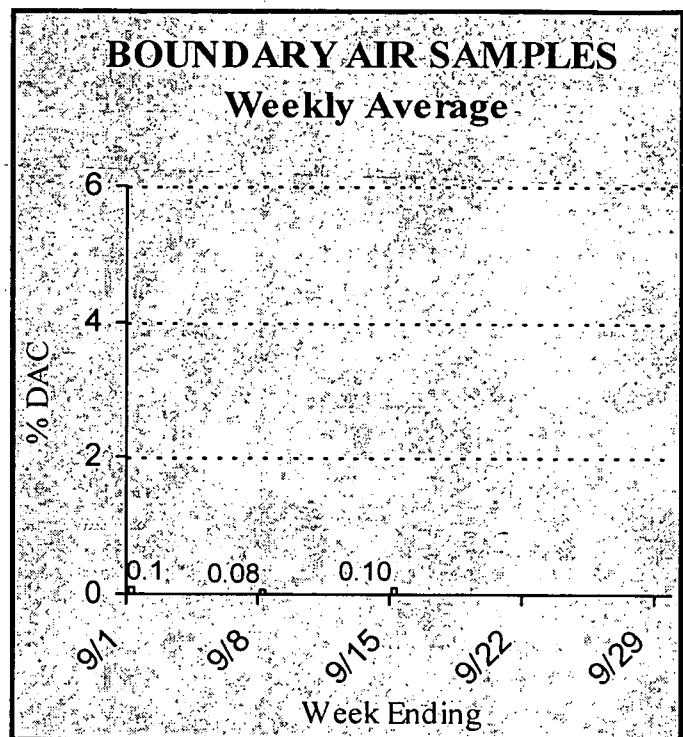
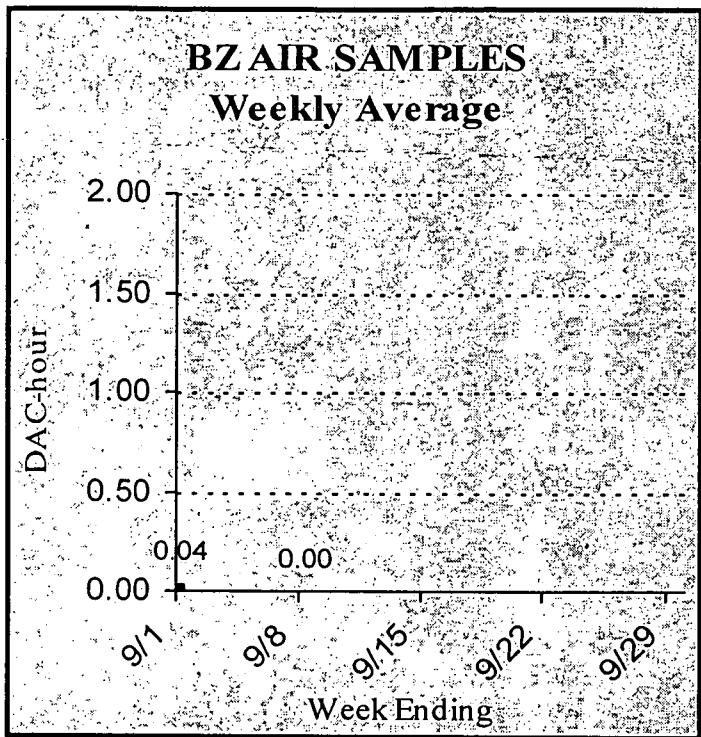


000016

3332

Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

# 3332 Southern Waste Units - September



## Project Activities and Events

- Hauling of materials from SWU, excavating from South Field and Active Flyash Pile area
- Excavation of debris/asbestos from areas on SWU and preparation for transport to OSDF
- SWU activities requiring air sampling stopped as of 9/15; general clean up and contractor demobilization ongoing

## Engineering and Administrative Controls

- Water application for dust control;
  - Controlled loading of equipment to prevent the spread of contamination
- 000017**
- Note: BZA limit -12 DAC-hrs/week; Boundary limit - 2% DAC averaged over a week

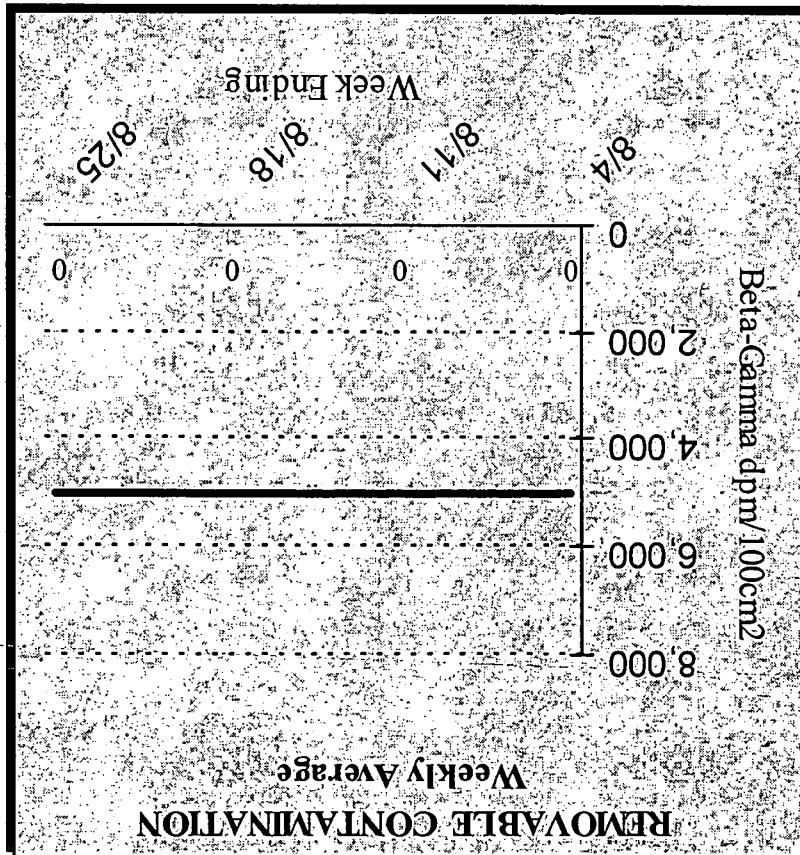
**000018**

- Note: Contamination level "limit" for HR activities - 1000 dpm/100cm<sup>2</sup> (0 on graph indicates less than 1000 dpm/100cm<sup>2</sup>)
- Bed spray for untrapped haul vehicles
  - HR posted as a Radiological Buffer Area for the entire length (from OSDF to SWU), with the exception of the established crossings, during this time period

### Engineering and Administrative Controls

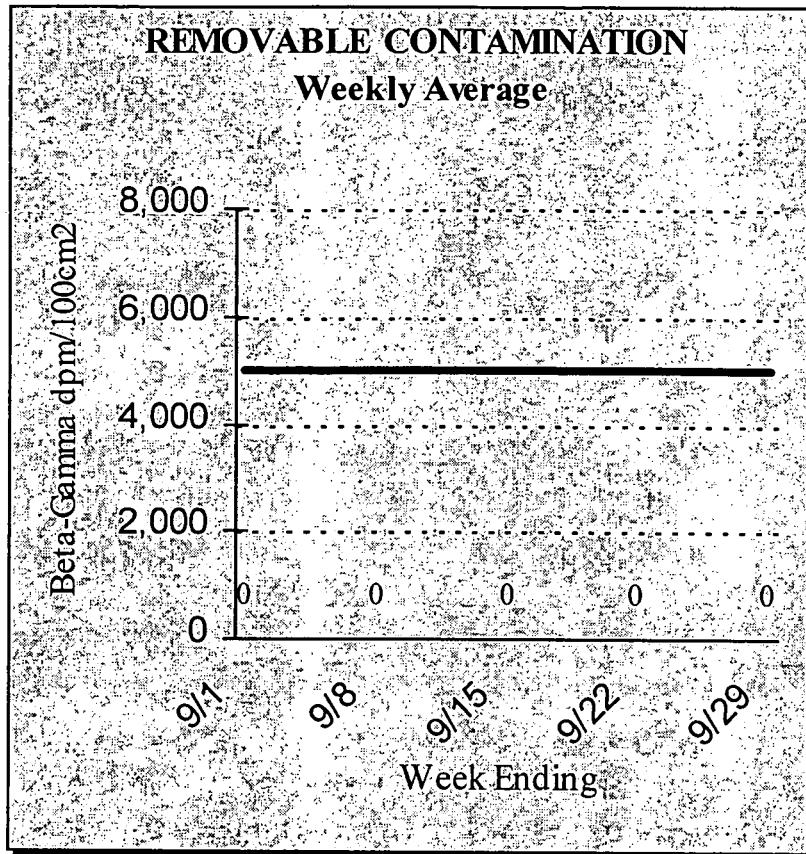
- Use of controlled loading processes to prevent spread of materials to outside of truck beds
- Use of articulated trucks to haul from SWU (no tarps with bed misting from WWF)
- Wheel washing of all equipment entering the HR from SWU or OSDF (automated WWF with manual assist as necessary)
- Hauling from SWU, K-65 Silos parking area, and OMTA to OSDF;

### Project Activities and Events



Haul Road - August 3332

# Haul Road - September



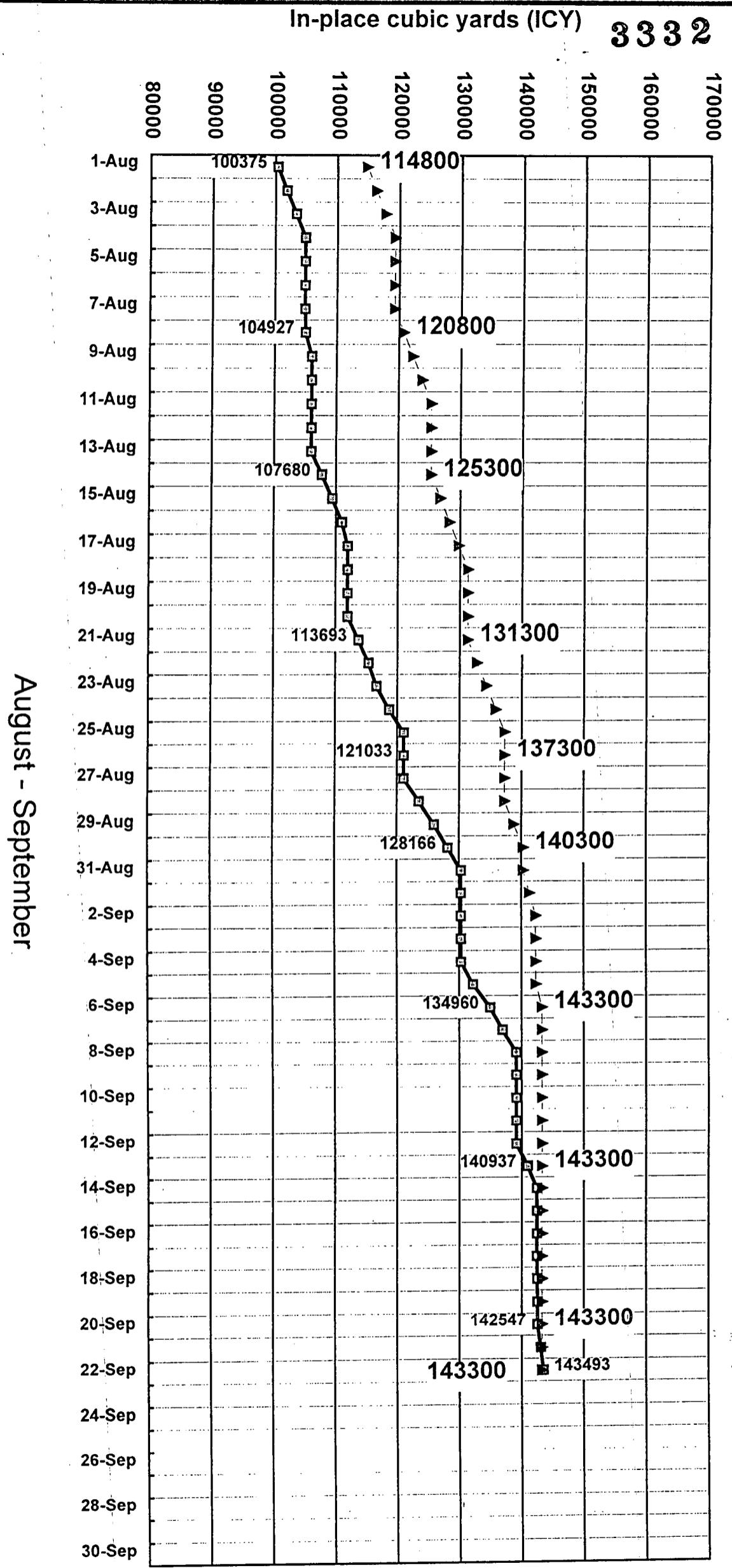
## Project Activities and Events

- Hauling from SWU and OMTA to OSDF;
- Wheel washing of all equipment entering the HR from SWU or OSDF (automated WWF with manual assist as necessary)
- Use of articulating trucks to haul from SWU (no tarps with bed misting from WWF)
- Use of controlled loading processes to prevent spread of materials to outside of truck beds

## Engineering and Administrative Controls

- HR posted as a Radiological Buffer Area for the entire length (from OSDF to SWU), with the exception of the established crossings, during this time period
  - Bed spray for untarped haul vehicles
- 000019**
- Note: Contamination level "limit" for HR activities - 1000 dpm/100cm<sup>2</sup> (0 on graph indicates less than 1000 dpm/100cm<sup>2</sup>)

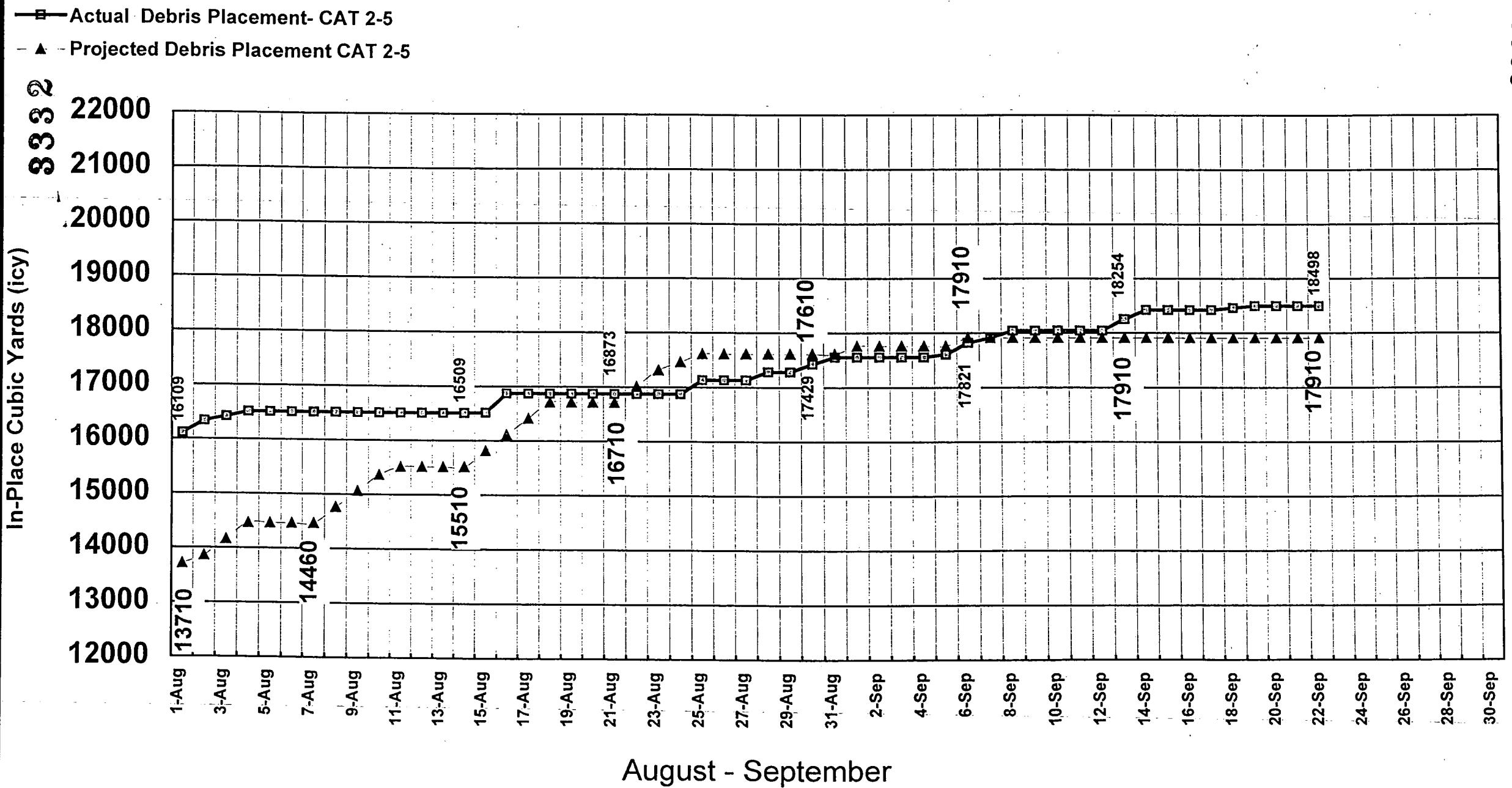
# CAT 1 Soil Placement



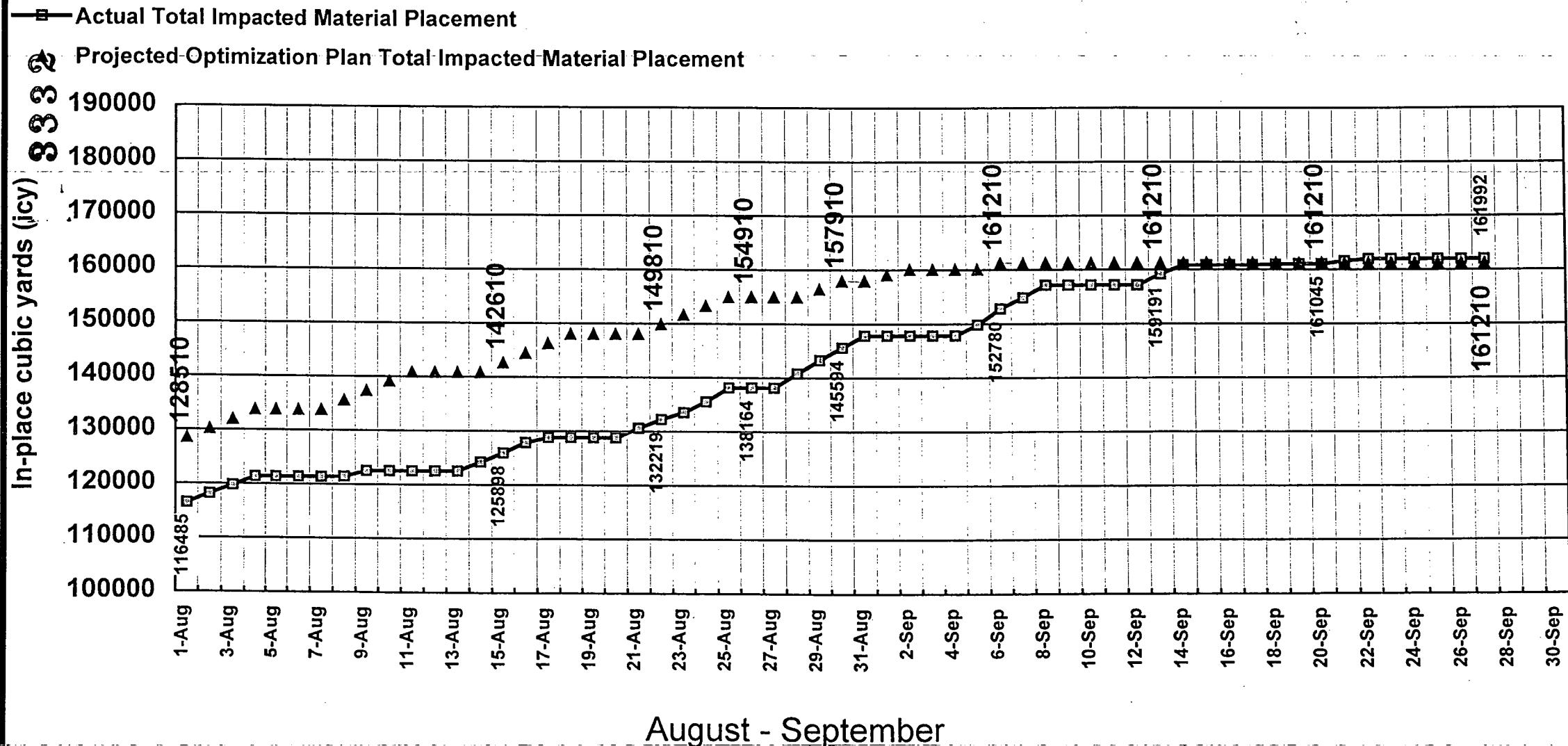
August - September

# Debris Placement

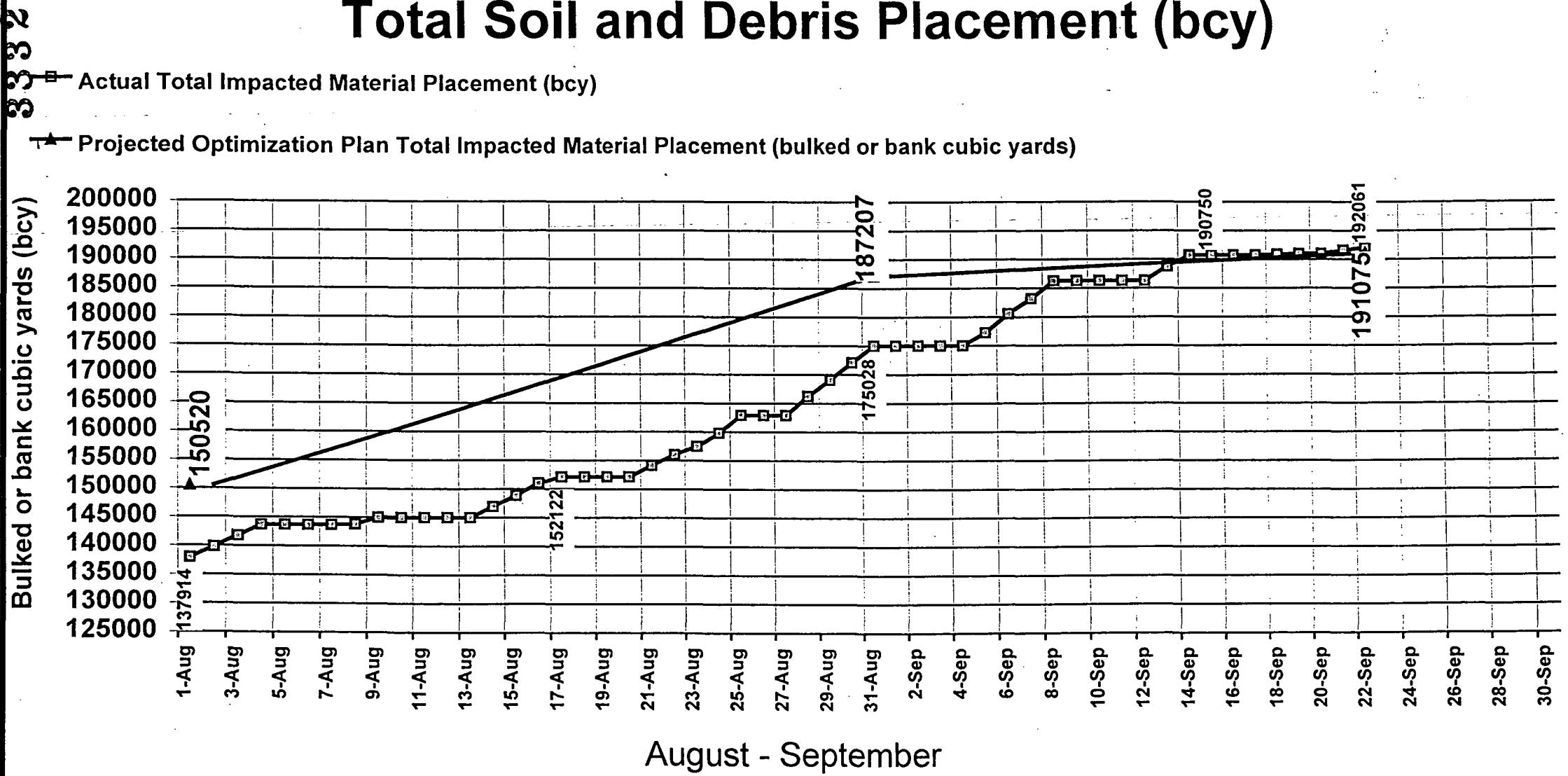
000021

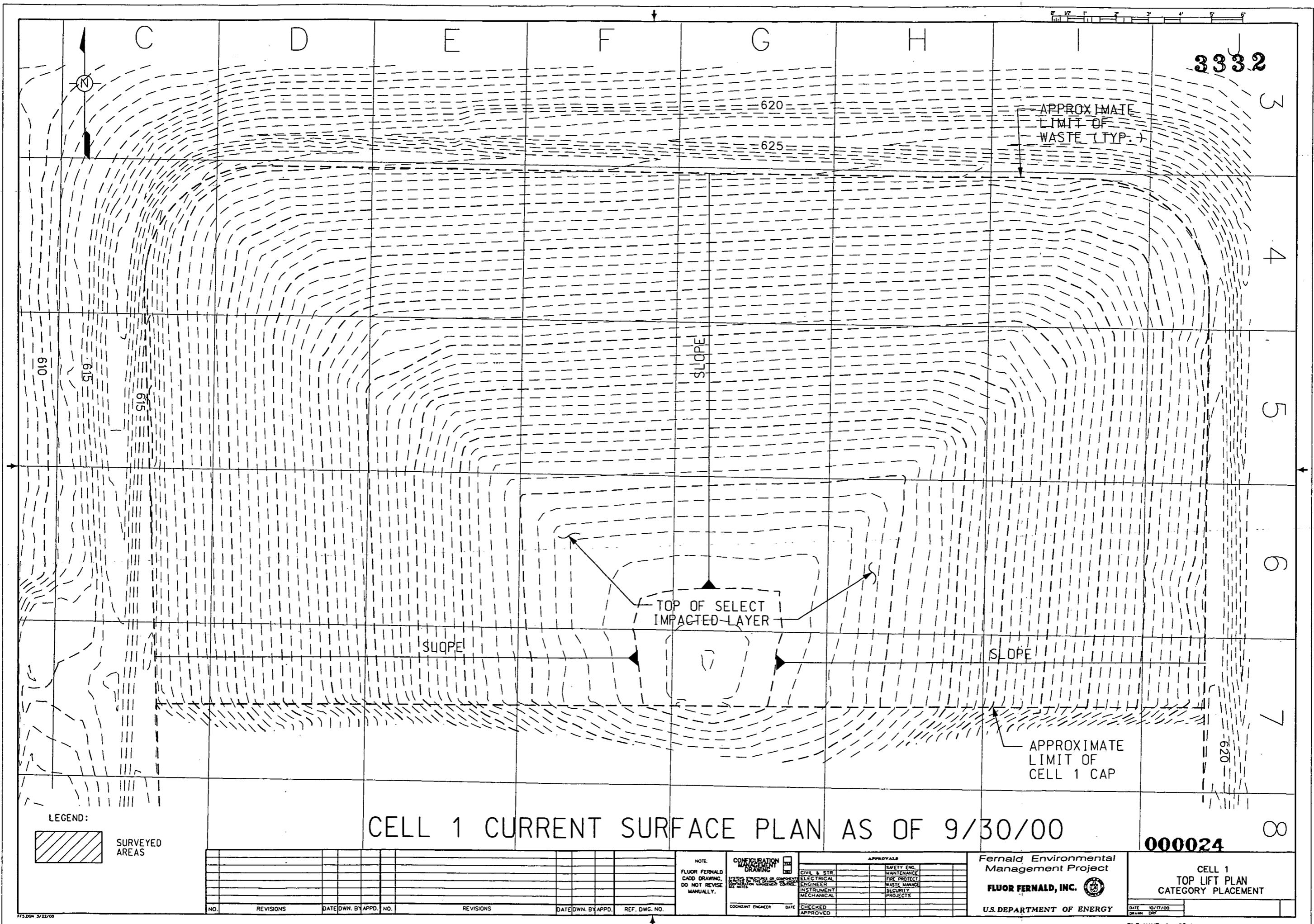


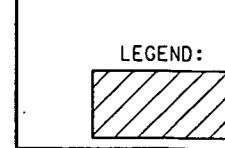
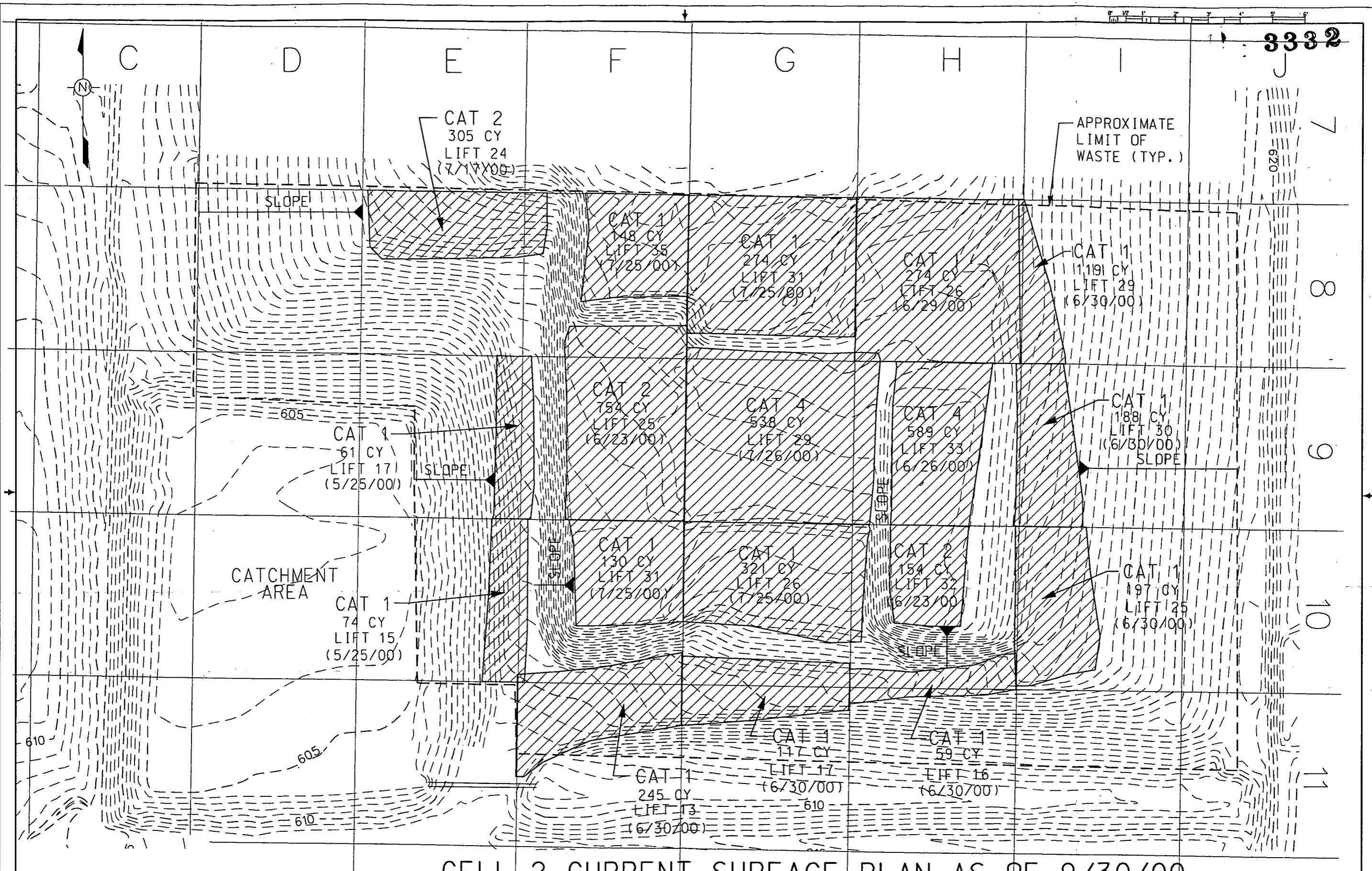
# Total Soil and Debris Placement (icy)



# Total Soil and Debris Placement (bcy)







SURVEYED AREAS

| NO. | REVISIONS | DATE | OWN. BY APPD. | NO. | REVISIONS | DATE | OWN. BY APPD. | REF. DWG. NO. |
|-----|-----------|------|---------------|-----|-----------|------|---------------|---------------|
|     |           |      |               |     |           |      |               |               |

NOTE:  
FLUOR FERNALD  
CADD DRAWING.  
DO NOT REVISE  
MANUALLY.

CONFIGURATION  
CONTROL DRAWING

STATUS OF THE DESIGN OR CONSTRUCTION  
ITEMS ON THE DRAWING. FOR ADDITIONAL INFORMATION  
SEE NOTE

COCKTAIL ENGINEER

DATE

| APPROVALS    |                |
|--------------|----------------|
| CIVIL & STR. | SAFETY ENG.    |
| ELECTRICAL   | Maintenance    |
| STRUCTURAL   | Project Select |
| ENGINEER     | Waste Manage   |
| INSTRUMENT   | Security       |
| MECHANICAL   | Projects       |

CHECKED

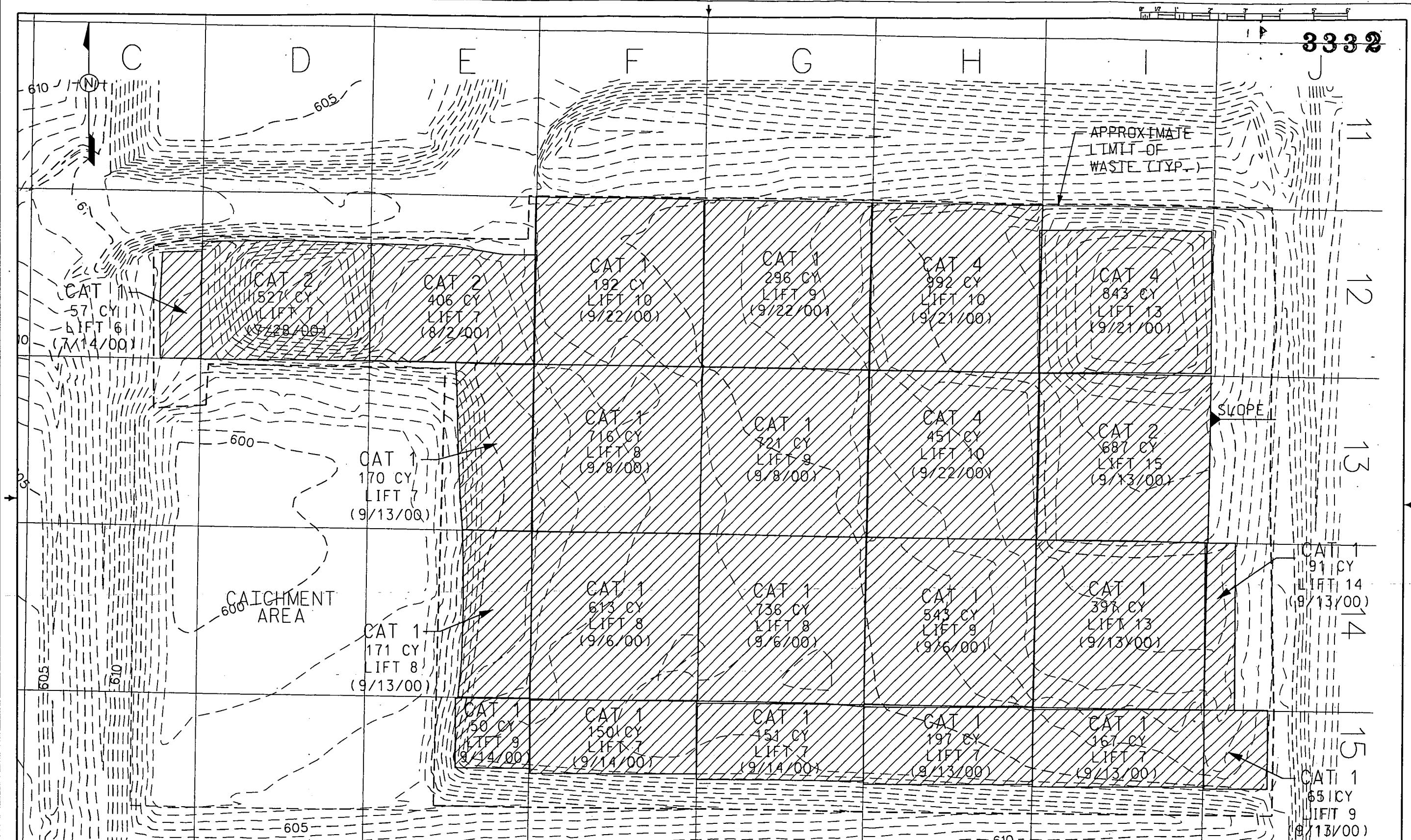
APPROVED

Fernald Environmental  
Management Project  
**FLUOR FERNALD, INC.**  
U.S. DEPARTMENT OF ENERGY

| CELL 2<br>TOP LIFT PLAN<br>CATEGORY PLACEMENT |  |
|---|--|
| DATE 10/17/00<br>DRAWN DWF                    |  |

FILE NAME: 2sep00.dwg

3332



00027

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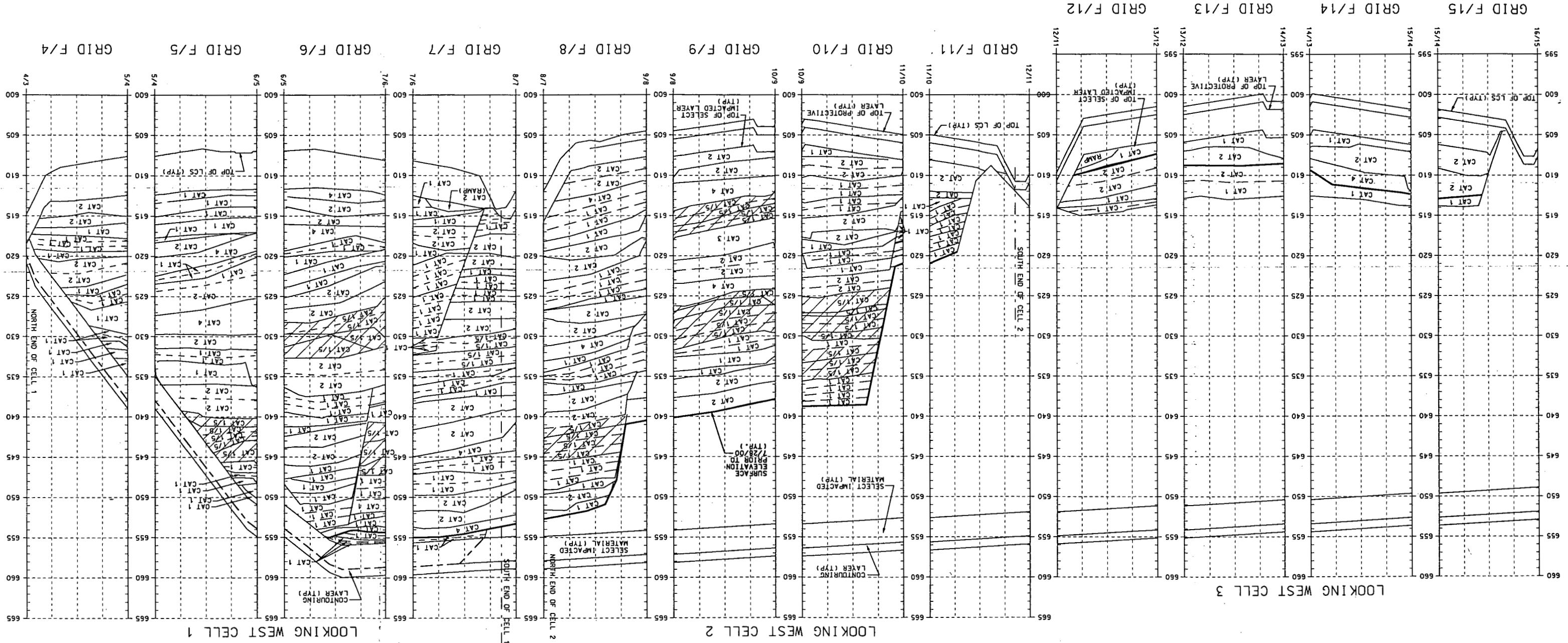
## OSDF GRID KEY PLAN

|      |      |                |      |      |      |     |     |     |     |     |     |     |     |  |
|------|------|----------------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|--|
|      |      |                |      |      |      |     |     |     |     |     |     |     |     |  |
| 15,B | 14,B | 13,B           | 12,B | 11,B | 10,B | 9,B | 8,B | 7,B | 6,B | 5,B | 4,B | 3,B | 2,B |  |
| 15,C | 14,C | 13,C           | 12,C | 11,C | 10,C | 9,C | 8,C | 7,C | 6,C | 5,C | 4,C | 3,C | 2,C |  |
| 15,D | 14,D | 13,D           | 12,D | 11,D | 10,D | 9,D | 8,D | 7,D | 6,D | 5,D | 4,D | 3,D | 2,D |  |
| 15,E | 14,E | 13,E           | 12,E | 11,E | 10,E | 9,E | 8,E | 7,E | 6,E | 5,E | 4,E | 3,E | 2,E |  |
| 15,F | 14,F | 13,F<br>CELL 3 | 12,F | 11,F | 10,F | 9,F | 8,F | 7,F | 6,F | 5,F | 4,F | 3,F | 2,F | F'   |
| 15,G | 14,G | 13,G           | 12,G | 11,G | 10,G | 9,G | 8,G | 7,G | 6,G | 5,G | 4,G | 3,G | 2,G | G'   |
| 15,H | 14,H | 13,H           | 12,H | 11,H | 10,H | 9,H | 8,H | 7,H | 6,H | 5,H | 4,H | 3,H | 2,H | APPROXIMATE LOCATION OF<br>INTERCELL BERM (TYP.) |
| 15,I | 14,I | 13,I           | 12,I | 11,I | 10,I | 9,I | 8,I | 7,I | 6,I | 5,I | 4,I | 3,I | 2,I | APPROXIMATE<br>LIMIT OF WASTE (TYP.)             |
| 15,J | 14,J | 13,J           | 12,J | 11,J | 10,J | 9,J | 8,J | 7,J | 6,J | 5,J | 4,J | 3,J | 2,J |  |
| 15,K | 14,K | 13,K           | 12,K | 11,K | 10,K | 9,K | 8,K | 7,K | 6,K | 5,K | 4,K | 3,K | 2,K |  |

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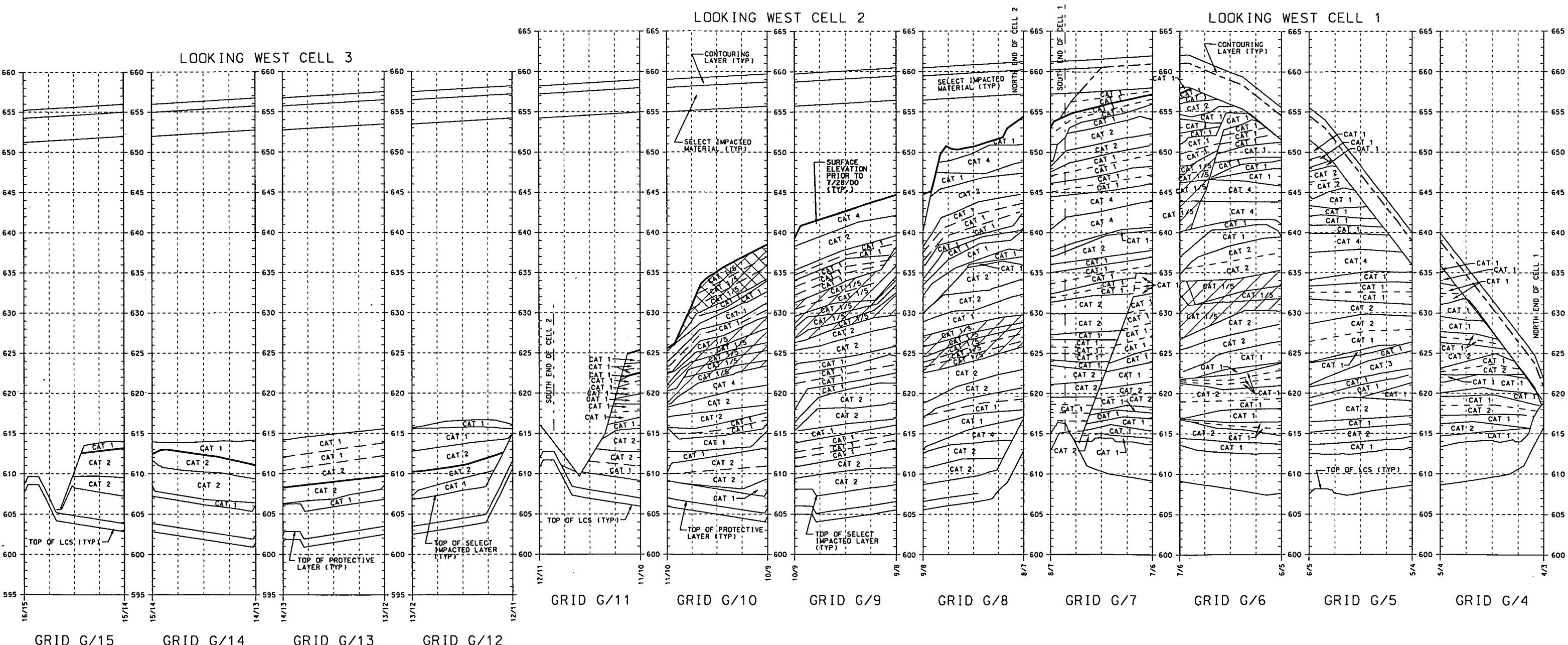
REVISED 10/12/00 (10/11/00 SURVEY)

SECTION F-F'



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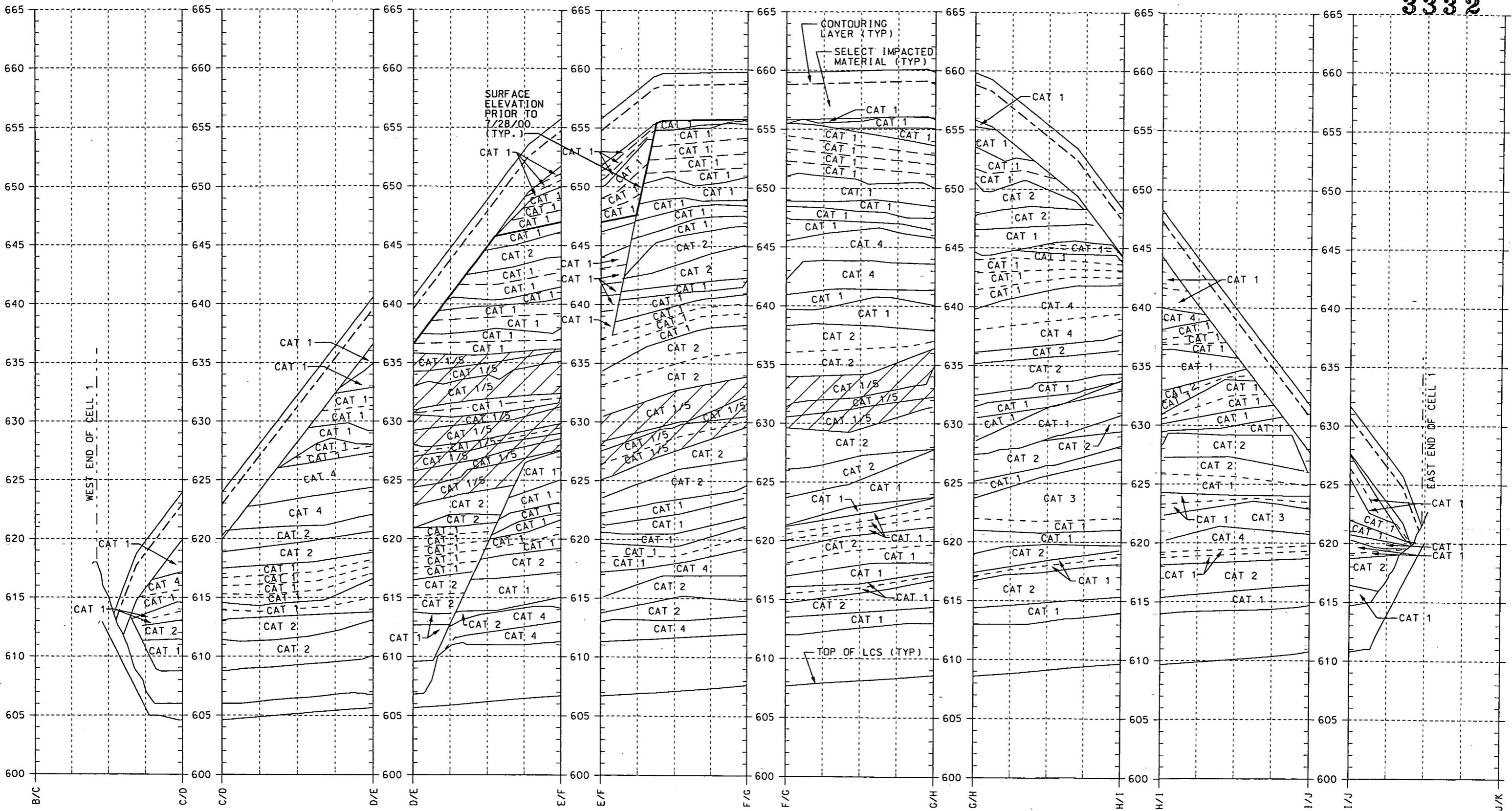


SECTION G-G'  
REVISED 10/12/00 (10/11/00 SURVEY)

000029

LOOKING NORTH CELL 1

**3332**

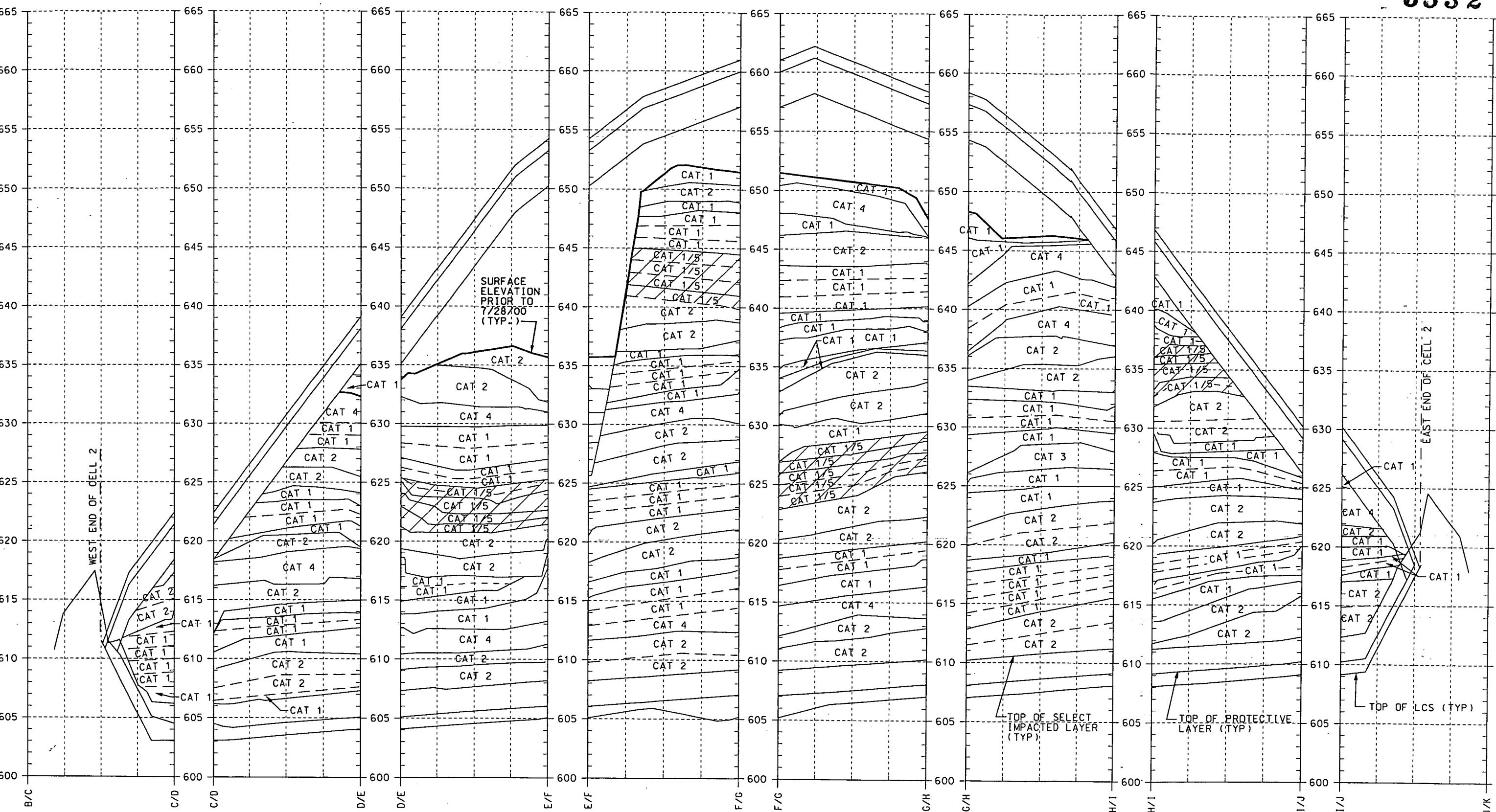


SECTION 6-6'  
REVISED 10/12/00 (10/11/00 SURVEY)

**000030**

LOOKING NORTH CELL 2

3332



SECTION 8-8'

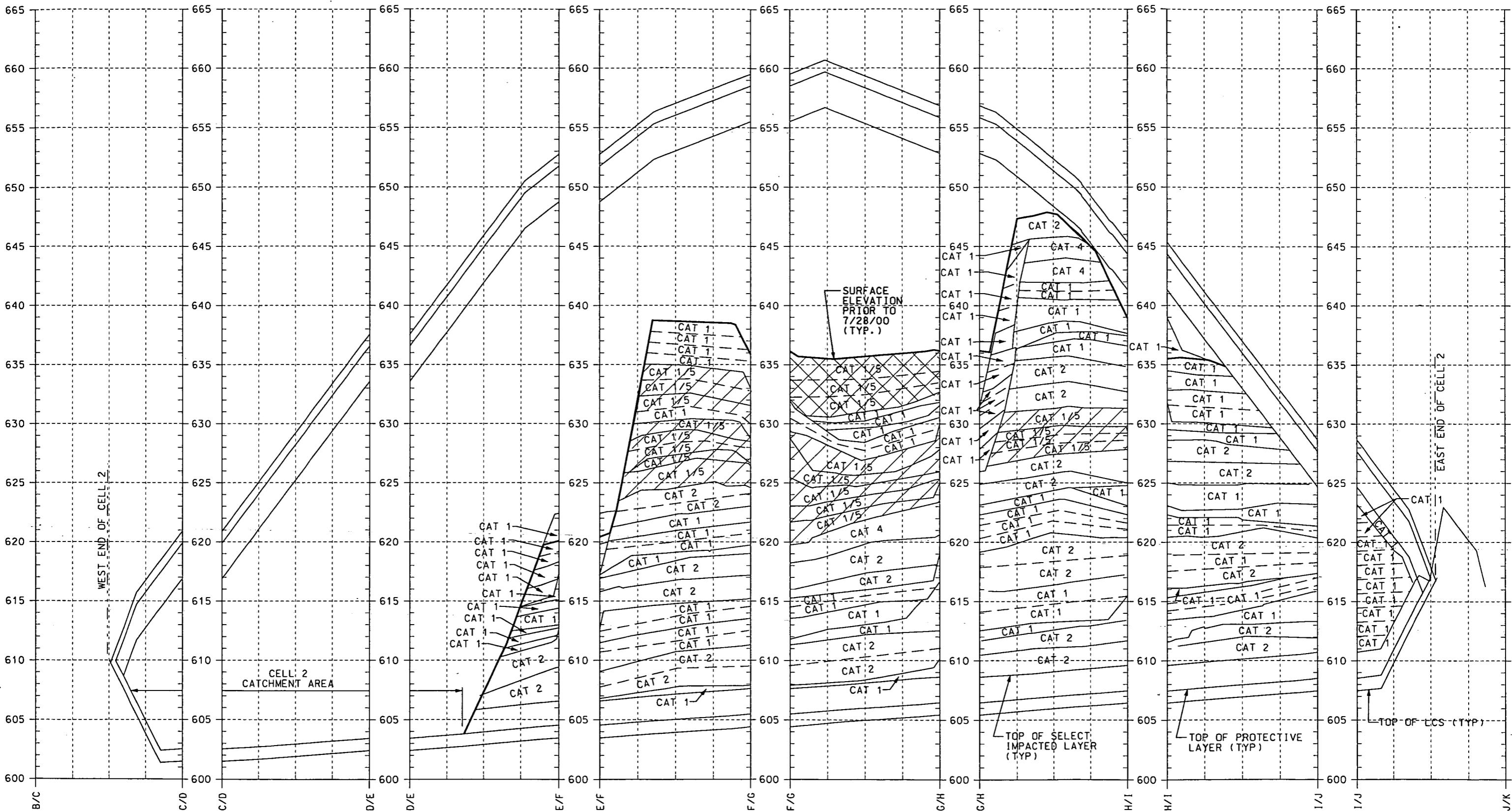
REVISED 10/12/00 (10/11/00 SURVEY)

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sepsect00.dgn

LOOKING NORTH CELL 2

- 3332



GRID C/10

GRID D/10

GRID E/10

GRID F/10

GRID G/10

GRID H/10

GRID I/10

GRID J/10

## SECTION 10-10'

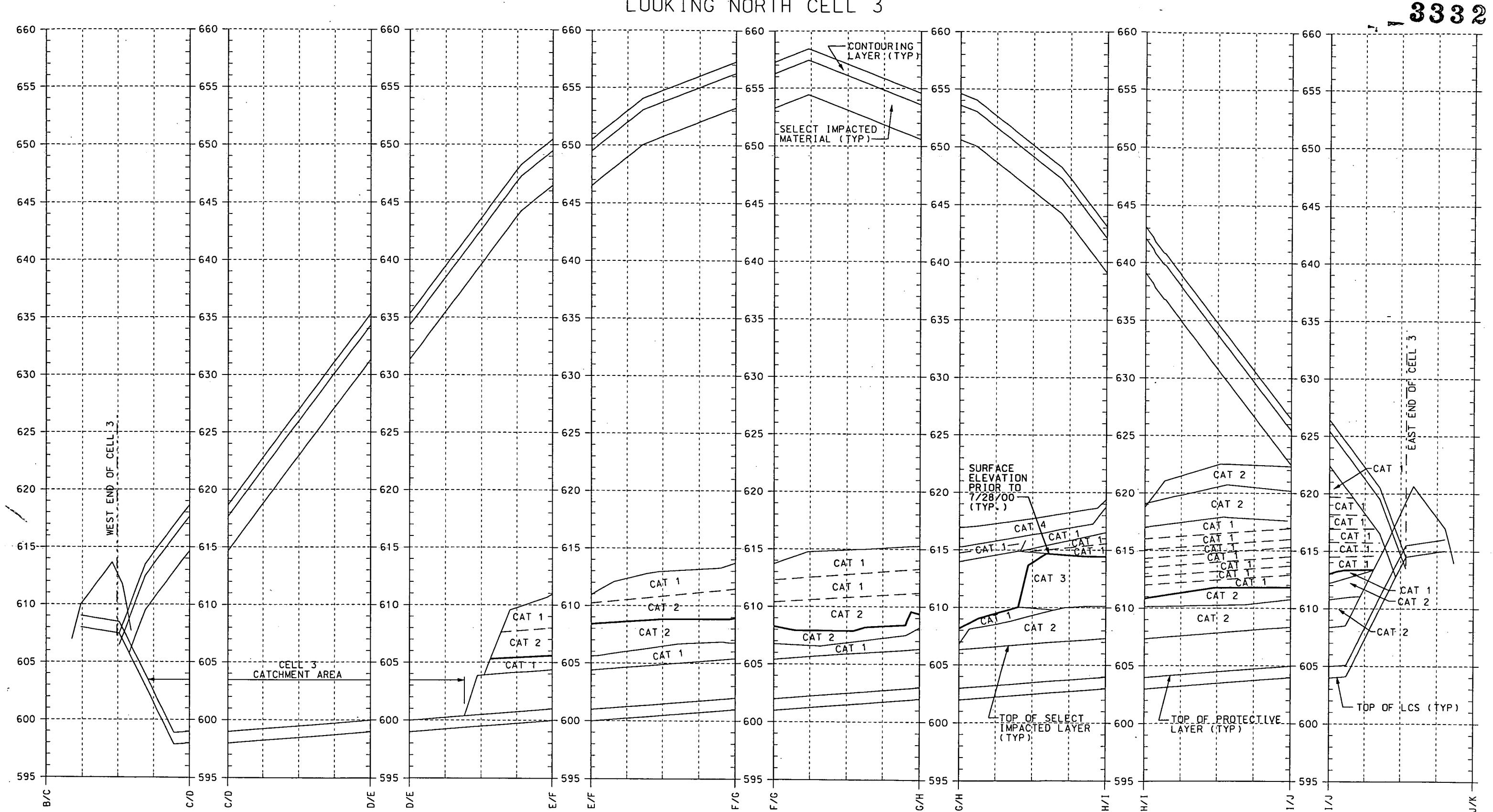
REVISED 10/12/00 (10/11/00 SURVEY)

000032

sepsect00.dgr

LOOKING NORTH CELL 3

3332



SECTION 13-13'

000033

SEPSector.dgn